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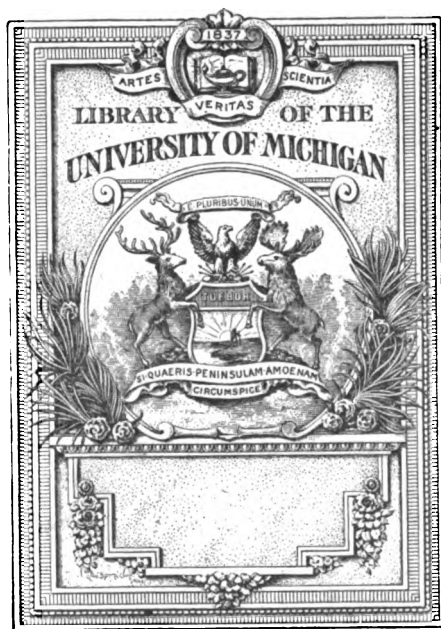
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Delusions, Illusions and Hallucinations.

READ BY DR. C. B. BURR, OF PONTIAC, MICH.,
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THE SOCIETY.

A DELUSION is commonly defined as a "false belief," and the assertion that one is laboring under a delusion, implies that he holds a belief on some point at variance with that commonly taught, or entertained by the vast majority of thoughtful and intelligent people of the age in which he lives. Minds in all ages have been swayed by erroneous beliefs, but those adopted by the masses and capable of being corrected by the progress of thought and increased enlightenment of the people, cannot be accounted, legally speaking, delusional. Thus the beliefs in witchcraft and diabolic possession so prevalent in preceding ages, though absurd and unreasonable enough to cultivated people of the present time, were, in the days in which they held sway, firmly relied upon by the masses, and disbelief argued mental perversion or satanic possession itself. Errors of this class have frequently shown a distinct epidemic character, and a relation to the prevailing religious belief. I use the term epidemic advisedly. No one who has studied the literature of the subject can fail to be acquainted with the fact that, in the world's history, popular delusions have prevailed epidemically, or found expression in deeds of ferocity and violence periodically.

The history of the witchcraft excitement in England, Scotland, and unfortunately in our own country, illustrates the epidemic character as well as the baneful effect of a popular delusion unrestrained, and enforced by fanaticism and superstition.

It is a startling fact, and one showing the tyrannical nature of religious belief, as well as the pernicious consequences of misdirected religious zeal, that under Cromwell's reign, brief as it was, more witches were destroyed in England than in all the period during which the witch mania prevailed. "In those

days the office of witchfinder (I quote from Dr. Workman) was one of no small distinction, and it has been calculated that from 1603 to 1680 the total number put to death by regular legal process alone was about 70,000."

Pen cannot picture the horrible sufferings and sacrifices which the belief in satanic possession, lycanthropy, and similar delusions during the 16th and 17th centuries entailed. Through the confession of an insane nun that she was the subject of demoniacal possession, this delusion spread from one convent to another throughout Europe. Fifteen nuns in one convent of fifty confessed to satanic possession. The most horrible and revolting confessions were made by, or extorted from, these unhappy creatures, and those whom their statements implicated. The ones originally affected suffered from hystero-epilepsy, a grave nervous affection, and the sight of convulsive seizures, contortions and frenzy exhibited by these poor creatures infected those about. The soil was of the very best for the propagation of any epidemic nervous disorder. With nervous systems impaired by an ascetic life, defective nutrition, hardship and privation, the nuns readily fell victims to the disease. The present century has witnessed an outbreak of the same malady in a convent in France. It occurred about twenty three years ago, but gained but little force owing to the enlightenment of the age and the active efforts made towards its suppression by the medical profession.

The belief that through the agency of the devil a man may be transformed into a wolf is an old error and one that gained great credence in the sixteenth and seventeenth centuries. It also prevailed epidemically, and as a rule among the ignorant and superstitious peasantry who were at the mercy of the priests. One epidemic, that of St. Cloud, was terrible in its severity and consequences. "One Bouguet, chief judge of the place, was charged with the duty of extirpating it, and he acquitted himself of his mission so faithfully that, according to Voltaire, he boasted toward the end of his career that he had strangled or

burned at the stake more than six hundred lycanthropes or demonolators."* Extreme torture, solitary confinement and great privation were used in extorting confessions of guilt from suspected persons. These measures frequently produced insanity and were thereby successful.

As intimated, the present century with all its boasted culture and advancement has not been wholly free from religious delusions and epidemic "crazes." Nor need we turn our eyes from our own country for confirmation of this fact. The Millerite excitement which raged during the period of years from 1840 to 1845 had, overlooking possible benefits to a few, a widespread pernicious influence. The founder of this sect was one William Miller, a farmer, born at Pittsfield, Mass. He was a man of limited education but an impressive and earnest speaker, and possessed of considerable force of character. He announced in 1833, when he began his preaching, the second coming of Christ, the date of which he fixed at 1843. In preparation for this event, his followers, who numbered thousands, were enjoined to put away their earthly goods and prepare for futurity. Large numbers did so; put on their ascension robes of white and anxiously and expectantly awaited the millennium. The grievous disappointment experienced through the non-fulfillment of his prophesy and the poverty into which many were plunged through having given away their property, produced in some actual insanity, and left many permanently pauperized. I have in mind a man at one time wealthy, now aged and an object of charity, who, at the beginning of this furor, gave all his property to others.

In the early part of the present century, there occurred in Kentucky an outbreak of religious excitement, which well illustrates the points referred to. Enthusiasm and interest were wide-spread, and confined to no class or condition. The meetings were largely attended, and the greatest emotional excitement prevailed. Hundreds were seized with what was called the "jerks," a cataleptoid or epileptoid condition brought on through the influence of overwrought emotions. The example furnished by one in a convulsed state seemed contagious, and the infection spread from one to another throughout vast congregations.

The prophetess, Jemima Wilkinson, who

flourished in the early part of the present century in New York state, made many converts to her peculiar views. The most of her congregation believed fully that she was able to perform miracles, and she avowed this ability firmly, and it is thought by many, conscientiously. It is related of her that on one occasion she declared her intention of walking on the water. She assembled her followers together on the edge of a lake and inquired if all believed that she could perform a miracle. Finding that all did not have faith, she said that the accomplishment of this one would be impossible unless she were thus sustained. At this a few of the doubting ones expressed a belief in her powers. Others continued in their skepticism. Eventually by dint of persuasion and entreaty she gained from each one an avowal of belief. At this point she said that if it were true that all did believe that she possessed the power which she professed, it was precisely as satisfactory as if she performed the miracle, which, accordingly she decided not to do. She claimed to be the second Christ, and asserted her ability to raise the dead. On one occasion she provided a living subject, placed him in a coffin, and at a given sign, brought him forth as if from the dead. Singularly enough this imposition was believed in by many of her followers. The observation of Maudsley, that there is no presuming too much upon human credulity is here well illustrated.

It is said that at the present time, in a quiet quaker village in Ohio, a religious revival is in progress, having wonderfully sensational features. The interest has been intense; people have attended the meetings from great distances; services have been protracted: the nervous tension and emotional excitement have produced a variety of nervous phenomena. Cataleptic trances, conditions of ecstasy and attacks of insensibility have been witnessed. One example is cited of complete insensibility produced in an avowed atheist and at two successive times. During the latter seizure, which was believed by the ignorant people to be a visitation from the Almighty, the unfortunate man imagined himself in hell, and gave his experience freely.

Delusions of this nature are of interest to us chiefly as showing how a vivid and unrestrained imagination in a susceptible individual, may be so wrought upon that the judgment is impaired or temporarily annulled, and the highest faculties of the mind thrown into

*Hammond. Insanity.

a state of **abeyance**. As professional men, however, we are called upon to treat delusions, to study delusions in their relations to different types of insanity, and as affecting the responsibility or accountability of the one by whom they are entertained, in other words, delusions as they are found among those who suffer from mental disease. These arise from a diseased mental state, and are themselves expressions of such a diseased condition.

Medically speaking, a delusion is a false belief, the unreasonableness or absurdity of which is not apparent to its possessor, and which cannot by argument, by declaration, or by the evidences of the senses, be made so apparent. It originates in a perversion of the function of the brain, and is largely dependent upon derangement of those parts of the cerebro-spinal system, having to do with the different special senses.

As we proceed the exact definition of the terms delusion, illusion and hallucination, often used interchangeably, will be necessitated.

By an illusion we mean the "perception of an object actually present but in characters which the object does not really possess." To use a familiar illustration and one adopted by a former teacher. One sees in the distance what appears to be a white bear. He knows that it cannot be a white bear, and realizes that just in that neighborhood there is pastured a white cow. Such erroneous visual perception, corrected by the judgment, then is but an illusion.

What is an hallucination? If, instead of looking at the animal which had the appearance of a white bear, he looked upon a level field where no object of any kind was in view, and still thought he saw a white bear, this would be an hallucination. An hallucination, therefore, is the "perception of an object as a real presence without the real presence to justify the perception."

While yet the person was able, by the use of the intellectual faculties, to argue himself out of the belief which the sensory impression originated, his trouble would be merely hallucinatory or illusional. When, however, the judgment was no longer able to correct the disordered perception, and the existence of the bear was believed in as a fact, a delusion would exist. A delusion accordingly is "a faulty idea growing out of an impairment or weakening of the logical apparatus."

Examples of visual and auditory hallucinations are met with among those apparently in

good health. They are, however, indicative of some cerebral disorder. When observed in the class of persons alluded to, the disorder is, as a rule, of a temporary nature. When repeatedly occurring, some definite cause for the hallucination can at times be assigned. Thus certain positions of the head favoring a passive congestion of the brain or irregularity in the circulation, may bring on visual hallucinations.

Some artists have used the power they possessed to produce images by an act of cerebration, to their great pecuniary advantage. Thus the celebrated painter, Sir Joshua Reynolds, was able, after a minute study of a figure for a certain length of time, to reproduce it exactly upon canvass, and did not require from those whose portrait he was painting more than one sitting. An eminent composer, after laboring hard in the composition of a piece of music, retired to bed, but slept fitfully and feverishly. During the night he experienced an hallucination of the presence of the devil in his room, who in return for his soul, made a compact with him to compose his sonata. On the following morning he was able to reproduce the sonata as communicated to him by his satanic visitor.

You are all familiar with the influence which intense mental concentration produces. Personally, while in bed imagining myself on ship-board and fixing my thoughts firmly upon an imagined motion of a vessel, I am able shortly to feel rocking as if the bed and room moved from side to side. Others of you, doubtless, have had similar experiences.

The hallucinations which occur as the result of alcoholic indulgence, of the use of opium, haschisch, and other narcotics, are also doubtless familiar to the most of you, if not from personal experience, at least through your reading upon the subject.

Winter, author of "Borderlands of Insanity," says that the hallucinations of all ages and countries have been marked by one invariable fact. They have referred to some peculiar train of thought or religious sentiment that impressed the public mind or the age in which the vision was seen. For this reason it is contended that all visions have proceeded from the minds of spectators instead of having had an actual, material basis. Many eminent men of all ages have believed in the reality of certain visions. Those of Mohammed and Swedenborg will be again referred to. Martin Luther believed that he

was visited by the devil in person. On one occasion he claims to have hurled his ink-horn at him, and to have driven him out of the room. Although a creation of his brain, of the reality of which he himself was convinced, this was not in his case a delusion in the legal sense, but an hallucination, inasmuch as a belief in a personal devil and visitations from him was current at the time he lived. Dr. Johnson, while walking in the street, thought he heard the voice of his mother, then many miles away, calling him. Sir Joshua Reynolds, after being engaged many hours in painting and then walking in the streets, said that the lamp posts seemed to be trees and the men and women moving shrubs.

Hallucinations and illusions are among the earliest manifestations of mental disease. Of the hallucinations, those of hearing are undoubtedly of the greatest frequency. When it is recalled that in order that functions of special sense may be normally performed, it is necessary that impressions from without should be properly recorded, properly transmitted to the brain, there co-ordinated, and as images brought within the sphere of the intellect, it will be apparent that any disorder of the apparatus upon which the impression from without is made, of the medium by which such impression is transmitted, or of the receptive centres for such an impression, might produce hallucinations. We are all familiar with the disturbance of vision which comes in consequence of sudden nervous shock; the "seeing of stars," so-called. We are also in this malarious country more or less acquainted with the impression produced by the constitutional effect of quinine upon the auditory apparatus. These are of the nature of hallucinations.

In fevers, the strange sights and sounds which the patient perceives are due to an excitation of the function of the brain by the increased amount of blood within the cavity of the cranium.

An hallucination results from the reproduction of previous impressions made upon the nerve centres and abiding in the memory. It is not uncommon to find hallucinations having some direct reference to the previous occupation in which the patient was engaged. A sea-captain, whose case has been under my observation, imagines that he hears and sees the actions of those engaged aboard ship. He gives his orders in an excited way, remonstrates, argues and entreats. Men who have lived sinful lives are quite apt to hear voices accusing them of wrong doing. A

sinful thought which may, in the course of a patient's life, have been indulged in, is brought to his recollection as an accomplished fact, and he hears voices denouncing him for a crime committed.

The condition of ecstasy which precedes and follows convulsive seizures, as those of epilepsy, is attended by an exaltation of function of special sense organs. In such states, visions are seen and sweet voices are heard. The patient imagines himself in the celestial regions, holds conversation with the Deity, and is attended by guardian angels and spirits. It is well-known that certain religious creeds owe their origin to the abnormal mental states of their founders. Mohammed was an epileptic, and his visions and inspiration undoubtedly came to him while in an epileptic state. Swedenborg also suffered from this disease and was at one time manifestly insane. Materialists have looked upon the conversion of St. Paul as due to similar influences.

Hallucinations of smell, though by no means common, are observed with some frequency in mental disorder. Such hallucinations may arise through disease at the peripheral expansion of the olfactory nerve, during its course, or in the olfactory centres of the brain. A patient under treatment at the Kalamazoo Asylum, who long entertained hallucinations of smell, was found after death to have been afflicted by softening of the brain in the left temporal lobe, that portion in which the centre of smell is said to be located. False perceptions of this sense give rise, like those of sight and hearing, to delusions. One patient under the writer's observation, imagined that some person fumigated his room. His condition became abjectly miserable; he was restless, drifted here and there, and could find no place secure from his fancied enemies.

Hallucinations likewise come in the later periods of mental disease, as an expression of the depressed nervous condition of the patient, although illusions more commonly occur at these periods. The disorders of sensation connected with one or the other of the extremities, commonly observed in cerebro-spinal disease, may, and frequently do, give rise to the impression that an extremity is of glass, of wood, of iron, or of ice. These are illusory.

The existence of a delusion implies a cerebral defect. Given such defect and the determining causes of delusions are too varied for enumeration. A morbid sensation in any

part of the body may be ascribed to the use of some instrument by foes from without. The presence of undigested food in the bowels, due to impaired nervous tone, on account of which digestion is impeded, gives rise to the belief that the person is filling up, that he cannot swallow, that the bowels are gone, that the connection between the bowels and stomach is severed, or that these organs are obliterated. Similarly in indigestion, the development of gas in the intestines, and consequent bloating, has given rise even in the male, to the delusion that pregnancy exists. One aged patient who suffers from a disorder of sensation referable to the abdomen, believes that his brother, his brother's wife, and the priest are all concealed there. The movement of gas in the bowels of a nervous subject gave rise to the belief that a voice was talking to her from within. A woman excessively fleshy, but whose nervous tone is greatly impaired, is under the impression that she is "all gone," wasting away, that her back is broken, that turning her body produces dislocations and fractures. You may well believe that her condition is a very wretched and unhappy one. Difficulty in breathing has led to the belief that noxious gases were introduced into the patient's room.

An interesting form of delusion is that in which dual personality is believed in. Three patients I have known have exhibited this in a marked degree. The impression arises in some cases, no doubt, from the general change in thought and feeling produced by the disease, of which change the patient is himself conscious, but the cause for which he cannot assign. To account for this change, he supposes the old individuality to be lost, merged into, or controlled by that of another. One of my patients thought that he must be himself, but could not account for his action if he was. Another holds conversation with, and receives orders from his other self, and a third has so lost his individuality that he no longer recognizes its existence, but speaks of his acts as those of "that boy" within him. It is not uncommon for patients suffering from dementia, to ask that their minds be restored to them, believing that they are controlled by others.

The dependence of delusions upon dreams is well defined in many cases. This is more commonly true, as may well be conjectured, among those naturally superstitious and of limited mental capacity. One of my patients believes that he is foretold events in this manner. He is warned of his enemies and

advised as to what friendships it would be proper for him to make. This patient also believes himself inspired. The determining cause of his delusion was originally an hallucination of vision. He imagined that he saw a bright light descending from heaven in the shape of a heart. The recurrence of this vision repeatedly, led him to believe himself a marked person, and eventually convinced him that he was inspired. His original visual hallucination was undoubtedly due to a retinal defect.

A belief in inspiration is not an uncommon mono-maniacal delusion. A gentleman who has been insane a number of years professes to hold direct communication with the Almighty; gives a minute account of the differences between the appearances of the different members of the Trinity, and speaks familiarly of the conduct and conversation of each. He believes that he is commanded to burn and slay. It is not difficult to imagine that were suitable opportunities afforded, he would carry out the divine behests.

Illusions and hallucinations connected with the sense of taste give rise, as previously stated, to delusions of poison. Similarly, a metallic taste in the mouth is considered by a patient to signify the presence of copper in the stomach, which he believes to have been put there by some enemy.

An isolated life favors the development of delusions. The withdrawal from society, the absence of new topics, and the necessarily restricted trains of thought are apt to lead to the production of morbid ideas. This, however, is perhaps a less important factor than the difficulties and hardships connected with a solitary life, the absence of proper food, and neglect of proper preparation of it, which produce insufficient brain nutrition. It is said of sheep herders on isolated ranches in the West, that they are extremely prone to insanity. I have been personally familiar with several insane people who have led hermit lives. Their delusions have been chiefly those of suspicion and persecution, but in one instance, at least, the reveries in which the person indulged when alone, lying by his fire, and the visions he then saw, led to the belief that he was inspired and to the impression that his longevity was to be great.

Delusions independent of any hallucinatory or illusional basis and arising within the consciousness of individuals may, for the purpose of study, be divided into two kinds; those of an expansive and those of a depressive type.

The operation of the evolution of delusions is startling and interesting. The patient suddenly becomes aware of an alteration in his physical or mental state. He is unable to account for it at first. Finally he may ascribe it to the machinations of some one inimical to himself who, by means of electricity, medicinal agents, or other harmful methods, is endeavoring to put him out of the way. The logical process may here stop and this conviction become thoroughly established, or may be carried to a still further extent. In the latter case the one persecuted seeks to explain to himself why persecution exists, and by bringing into recollection mysterious things which have been spoken in his presence in his youth, strange glances that have been cast upon him, brilliant stage scenes or similar displays, satisfies himself that he is a king, that he is the Saviour, or that he is heir to an immense fortune. And thus by a logical operation, a delusion of the depressive type becomes transformed into one of an expansive nature.

So uniformly are certain fixed delusions associated with diseased bodily states that it is sometimes possible to predict that such diseased state exists from the character of the delusion alone—thus, for example, delusions of suspicion connected with consumption. Patients suffering in this manner frequently refuse food through a belief in poison, commit sudden impulsive acts through fear of harm to themselves, and are moody and unhappy. On the other hand it is gratifying to see the contentment and expression of pleasure of the lunatic who imagines himself the Saviour, a king, the pope, or one who believes his mission is to bring about a social revolution and institute a great reform. Imagination cannot exceed the extravagant ideas entertained by certain insane patients who suffer from a form of disease known as general paresis. Their delusions are of the wildest and most grandiose character. They imagine themselves extremely wealthy. One whose case I was familiar with saw daily trainloads of immense diamonds coming to him. Another would by a motion of his hand pour gold into the Bank of England. Another imagined that the entire universe rested upon his shoulders, and would at times make the most desperate efforts to sustain it. Still another believed himself to be the holy father and his self-complacency and expression of contentment were of the most perfect type. One "sets out worlds" as he would cabbage or tomato-

plants. Another "paints the sky" by a sweeping motion of the hand.

In conclusion let me exhort you all to abstain from hobbies. To the medical mind they are indicative of one-sidedness of character and asymmetrical development. While it is true that geniuses have in all ages acted efficient parts by directing their attention exclusively to one line of study and thought, it is also true that those of a less contracted horizon who were able to weigh, measure and judge of utility, have wrested pecuniary award and even fame from the hand of the plodding one who was unable to look upon a question from more than one "point of view."

Lacerated Perineum.

PAPER BY DR. C. B. GILBERT, READ BEFORE
THE DETROIT ACADEMY OF MEDICINE.

Mr. President and Gentlemen:

The animated discussion of a week ago on lacerated perineum, covering so much ground and touching so many strong points in the details of treatment, does not much improve my chances of adding to the subject to-night. Any discursion into the bygone times of perineal lacerations must not be indulged now. Enough to say that with Ambrose Paré and his pupils began modern gynecology. From that time forward, progress has been steady and sure.

If at times the surgeon has seemed to lose sight of the principle of his treatment, looking too intensely at the mere details of manipulation, he might in the light of evolution be pardoned; for medicine, like other sciences, is not the favorite of special laws. What at first presents itself to us, and demands our approval, becomes in the end a mere accident of no particular value. Hence, too often, sufficient stress is not laid upon the particular thing to be done. Adventitious circumstances crowd too fast upon us — imagination, that prolific source of quantity and quality, is hidden by the debris of its own inventive ingenuity. Contending parties dispute the advantages of their opponents' views and contend for the advantages of their own. Controversy, not discussion, constructs a barrier not easily broken down. Discrepant opinions alluded to here have been too much concerned about the non-essentials of practice, insisting too emphatically upon *ipsedixits*. If, for instance, perineal support, as many have asserted and some still do assert, is positively hurtful, on what pretext can the contrary be

affirmed. If the perineal floor does not serve to sustain the organs above it, why should it not, so far as those organs are concerned, be dispensed with? What signifies authoritative opinion about such matters? What signifies experience or inference from the most obvious facts too often to the contrary? Such could rarely be the case if exceptional experiences were less individualized and better understood. These occasional favorable results, to which the healing art has contributed so little, should not surprise us, considering how little we know of the inherent forces, which in cases where we least expect it, are at work. We shall take it for granted that our object is to consider not only the best means of treating lacerations of the perineum, but what is of equal importance to the patient at least, how to prevent them.

It is safe to assume that, all things considered, the surgeon's skill is somewhat proportioned to his anatomical knowledge, though the converse is not necessarily true. But whether so or not, a distinguished gynecologist has expressed the opinion that much of the difficulty attending the successful treatment of these lacerations, is due to a partial ignorance of the anatomy of the parts.

Let us ask ourselves whether we can fully appreciate the nature of our task, and the hindrances to its accomplishment. I cannot do better than refer you to the diagrams in Dr. Thomas' work, where a better view of the anatomy can be gained than from any study of the tissues themselves, remembering only that an ocular demonstration is still better.

We shall presume then, that the anatomy of the perineum is, for all practical purposes, understood. I am not, however, convinced that the failures alluded to have been due so much to a want of anatomical knowledge as to the fact that effort has been directed too much to a union of the superficial parts, leaving the deeper parts to take care of themselves. Perhaps had operators been more careful to secure perfect union of the deeper structures, with a view to the support of the uterus etc., controversies respecting the support afforded by the perineum would have been less pointed. But we shall recur to this farther on. Our object then, is to call attention to a study of perineal anatomy, on account of its peculiar function.

The nature of these lacerations, like other lacerations, is simply a solution of continuity of surface, partial or complete, of the perineum. The partial may be only a few lines in extent, running down to the sphincter ani.

The fourchette alone may be torn through, or in more severe cases the rent may include the sphincters. Very rarely a central opening is made directly through the perineum through which the child may pass.

The direction of the laceration may be along the raphe or zigzag, crossing from one side to the opposite in the form of the letter S.

Of the proportionate number of any one of these forms, I have nothing to show. It is only fair to say that no doubt the simpler form is more frequent. When through the sphincter ani the recto-vaginal septum does not easily escape; from one-half to two or more inches may be torn. The consequences of this severer variety are easily anticipated, not only prolapse of the uterus or bladder, or both, but what is extremely annoying to the patient, the unavoidable escape of feces and gases from the rectum. Mitigating circumstances, however, sometimes fall to her lot. Life is not so imbittered, as the history of some cases would lead one to suppose.

The *causes*, or rather conditions, for such they are, that give rise to this distressing accident are peculiar to mother and child.

Of the mother—a deformity of the pelvis at the outlet, forcing the head of the child backward, a too vertical sacrum, permitting a too rapid descent of the head, especially if the pains are strong and persistent, a perineum too tense or too lax, are likewise disposing causes. Mal-positions, or mal-presentations by bringing the long diameters to bear directly upon the parts, contribute their share to the accident. The influence of ergot given to expedite labor, or to prevent a fancied hemorrhage, are beyond question in the hands of the ignorant or impatient, fruitful sources of rupture. Few of the predisposing causes then are under our control. Deformities cannot be corrected. Mal-positions, etc., usually may be. Relaxation often succeeds medication. Rapidity gives way to counter pressure. Direction obeys the timely and intelligent use of forceps. The *principles* which should guide us in all these cases may be taught—the practice never—it must be acquired. The tendency of direction and force must be studied and obviated.

Treatment is both *preventive* and *curative*. A few of the indications of the former have been referred to. The most distinguishable features of the former, or preventive, is supporting the perineum. *How* this is to be done, and if ever so *well done*, is the subject

of controversy. The many affirmations and denials of this method, must, at present, at least, be very embarrassing to the student and junior practitioner. Whatever may be said in favor of it, it must be considered that many of our best writers, past and present, have firmly opposed it, nor will it be charged against them that they are wanting in appreciation of the difficulties to be overcome, difficulties not in the manner of executing the pressure, but in the dangers attending it.

The post hoc ergo propter hoc argument so often urged in its favor is not always conclusive. It reads too much like vital statistics, telling us how many illegitimates shall be born during the next decennial, but refuses to give us the parents.

Rubbing may not be a bad thing, after all, in some cases, but this does not establish its utility. It remains to be seen whether or not the patient would have got along very well without it. There is this much in its favor: it has a long history. Between kneading and stretching in the most approved plans, it went on tearing all the same. It is not a substitute for holding back the head or slowing the pains. Its principal object, if it can do any good at all, is to prepare the way for the more rapid descent of the head, the very thing to be avoided. W. Tyler Smith's opinion is that perineal pressure tends to excite reflex action of the uterus, and so long as continued must do harm. It is also stated on high authority that secret births are seldom attended with lacerations. The editor of Dr. Smith's lectures is directly opposite. Forcing the head back while it is pushed forward against the pubic arch, by inserting one or two fingers into the anus, the thumb resting on the head, assisted by the other hand, it may be, is, perhaps, as good a plan as can be suggested to prevent the laceration.

The plan of lateral incisions is both approved and condemned. I think I should make them, if I saw no better way of escape. Next to changing positions, the use of forceps, by making traction in the right direction with just so much force, and no more, as is sufficient to deliver the head without rupture, certainly is good advice. But in the most skilful hands it has sometimes failed. Yet, no doubt, if properly handled, the forceps is a real power for good. "Result, not rapidity," is to be observed.

In the few ruptures that I have seen, I have not been able as yet to learn at what time of the head's exit the rupture occurred. Sometimes it seems to have happened when

the shoulders were passing. But the moment of greatest strain is when the occipito-frontal or suboccipito-frontal corresponds to the antero-posterior diameter of the outlet. If we watch the head while in this position we shall see that resting against the pubic arch the head becomes fixed for a while. Extension has taken place. The face has receded from the chest in its sweep over the sacrum, and is pushed forward by the uterus acting through the spinal column. Reaching the floor of the pelvis the soft parts are now pressed up and for the time being, arrests its further progress. If now the patient is urged to bear down while the pains are strong, or the forceps is used, not in the line of least resistance or depressed before the vertex has quite passed the arch, the dreaded result will be imminent. In a case where, from undue proximity of the pubic rami, I could not deliver while keeping close as possible to the arch, the instant the forceps was depressed, delivery was effected, but at the expense of the perineum; immediate sewing up restored it.

What is the history of the curative treatment of these lacerations? Only this—so many devices to achieve the simplest result in operative surgery.

One writer will compress the treatment of a severe case in a few lines—another shall need as many pages—whether partial or complete. One party only observing cleanliness, will trust to the resources of nature. Another more distrustful, deems art the most expeditious and better way—only keep the parts in apposition—prevent the intrusion of noxious irritants and the case will get well.

Says one: Be less confident, use sutures, silk, silver-coated iron wire, silver wire, horse-hair, twist the ends of the wire, or tip with perforated shot, use the quill suture in partial ruptures, the wire sutures for rupture through the sphincter. Close up the rent in the recto-vaginal septum, use the catheter once or twice a day to prevent the urine from dribbling through the rent or the lochial discharges, etc., says another. Now just what in principle we would do in an ordinary case of lacerated wound upon the thigh or nates, or elsewhere, we should do here, keep the torn parts in such apposition that, without hindrance, the pabulum that is to unite the two surfaces, should be allowed to do so. To this end, whatever is likely to prevent this must be obviated. Who does not know that the resources of art are more likely to effectuate this recovery, than if left alone? And what

better plans can be devised than sutures of some kind aided by rest and cleanliness? Should the tissues or blood be deficient in some of their important qualities, these should be restored. If the nervous system is below par, arouse it to a healthier action. Let every organ and every function receive its proper attention.

Now in summing up this matter, does any one of the many methods employed recommend itself to us more than another? I think without doubt that whatever success attended the let-alone plan with partial rupture, immediate operations with silk wire or quill sutures, shall give the best results.

What is true of partial ruptures is doubly true of complete ones. Should the operation fail at first, after three or four months it may be tried again. It seems almost evident that failures in simple cases should not occur, since when left to themselves these rents are quite likely to heal by granulation. I do not believe that sepsis of itself is an argument, demanding an operation. Delay with the loss of confidence in surgical aid, more than neutralizes the dread of submitting to it.

If one were asked whether healing by granulation is preferable to healing by first intention, a negative answer would almost be certain. And healing by the first intention when it can be secured, becomes a positive duty. And again, such is the mode, or the nearest approximation to it by an operation. While the parts are benumbed by labor, and the patient still partially under the influence of ether, the operation is not difficult. The number of able assistants said to be necessary after cicatrization has occurred, do not seem so now, nor without much delay, if they were, could they always be got.

The raw surfaces are well cleansed, bleeding if possible is allowed to cease, deep wire sutures, either forced through by a needle with the eye in the pointed end or otherwise, round as some prefer, or with a cutting edge, or drawn through by means of a loop of silk, are but so many modes of accomplishing the work. As to choice between silk and wire sutures, the latter are preferred, not as I believe, because less antiseptic, but because of the nature of the grasp they have on the tissues. The tendency of silk sutures, when the ends are drawn tightly, is to assume a circular form, whereas the wire sutures assume the oval form. Approximation throughout the entire surface, not pressing up, is what is desired.

The illustration I show you may assist my

notion. I also exhibit here a little device by Dr. Brickell, of New Orleans, intended to carry out the same idea. The report of four cases was made in 1875, but whether or not the plan has been abandoned I do not know. So far as the object of the disease was concerned it was successful. The chief thing to be observed always, whatever means are employed, is this—to keep the raw surfaces in close proximity, so that they may receive a near and healthy supply of blood to nourish them, to favor this end, to keep away all noxious material whatever.

Incipient Mental Diseases and their Relations to General Practitioners.

READ TO THE MIDDLESEX NORTH DISTRICT
MEDICAL SOCIETY BY WM. H. LATHROP,
M. D., OF LOWELL, MASS.

IT IS a well-known principle that mental diseases are most curable in their early stages. I desire, in this paper, to call attention to the fact that very many cases, if not the majority, pass through the critical period of curability before going to an asylum.

It is not the specialist in insanity in such cases that has the most important treatment of the case, but usually the family physician.

This knotty subject of insanity, which no one fully understands, is remanded to the specialist because we like to get rid of it, when justly every practitioner, being liable to have charge of the incipient forms, needs to give the subject a serious consideration.

Oftentimes the mind is noticed to be deranged before we would wish to sign a certificate of "insanity." When a person is legally declared insane, he is subject to restraint of some sort. His disease has reached such a stage that he cannot care for himself or his affairs without supervision. He must be deprived of some of the ordinary rights of a citizen—in a word, he must be *restrained*. Sometimes the restraint takes the form merely of a legal guardianship, the patient being deprived of the privilege of transferring property; sometimes friends exercise surveillance at home; but in almost all cases the patient is not pronounced "insane" until he is absolutely dangerous to himself or others, and not till then is he sent to a hospital for such diseases.

It is easy to understand that nearly all patients, before they reach this condition of dangerous insanity, have passed through a critical stage of momentous importance to

their cure. They have themselves struggled with the approaching evil, deploring their condition, but unable to help themselves. This is the period when friends should summon the family physician, and put the case into his hands for continuous observation. They should realize that now or never can they help the sufferer. But usually people shut their eyes to the possibility of insanity until really the disease is chronic, the will is overthrown, the dangerous symptoms make their appearance, and the patient goes to an asylum. The case is really chronic and incurable in very many cases when insanity is first admitted to be present.

By turning to asylum reports and studying the causes of mental diseases as there noted, we can form an idea of the treatment required in the incipient stage, and it will be apparent that in that stage, when there is the greatest susceptibility of cure, general practitioners usually have charge of the patients.

Taking the latest reports of the Worcester and Northampton Lunatic Hospitals together, we find the most frequent causes of insanity in patients recently admitted to be as follows: Heredity, intemperance, epilepsy, ill-health, masturbation, over-work, menstruation and the puerperal state, trouble, grief or disappointment, injury to head, religious excitement.

That heredity, which heads the list in frequency, is best appreciated by the family physician, it needs no argument to prove. It is he who knows best the peculiarities of the family. He has seen, perhaps, other cases of mental derangement in the same family, and has observed the peculiar dangers to which their minds are susceptible. He has attended the different members of the family in other sicknesses, and knows their tendencies.

I have in mind the case of a young man, in whose family insanity was known to exist. He met with business reverses, and was after that time very moody and peculiar in his words and actions. These peculiarities were noticed by the family, and they were very anxious about him, but they did not inform their family physician, or, indeed, any physician, of the true state of things. He went alone and sought medical advice from a comparative stranger, telling his own symptoms, and giving the idea that he was troubled only with indigestion. This patient committed suicide before he had been pronounced insane.

Another, who also belonged to a family of

insane tendencies, lost his property through unfortunate investments. He was the secretary of an insurance company. His family saw that he was unusually depressed, but took it for granted that his trouble would soon wear off, as in the case usually of other men. Soon, however, he very foolishly resigned his position in the company, and opened an office for himself. This act, which would have been well enough for ordinary men, was disastrous to him. The new responsibility was too much for him, and, although the business was successful, his mind steadily lost ground. He soon gave unmistakable signs of mental disease, and was sent to an asylum, there to remain a chronic incurable. Undoubtedly it was during the year or more preceding his committal to the asylum that his mind passed through the period when it was most susceptible of cure. The golden time of hope was when the patient was indeed of unhealthy mind, but not legally or technically "insane."

The next cause in the order of frequency is intemperance. If I pass this over with but few words it is not because it is unimportant, but it is so much discussed in its various phases as to be quite familiar. Whether the intemperance be exhibited in the use of alcohol, tobacco, opium, or some other drug, there is behind the mental manifestations the love of the article, acquired by long and persistent use. A cure, therefore, implies not merely the recovery temporarily, of mental health, but the abandonment of the habit. This is a kind of medico-religio-legal question, which we need not discuss, but unquestionably few cases that reach an asylum are ever cured. At a meeting of the New England Psychological Society, at which I was present, it was the testimony of all the members that they had rarely seen a cure, and some who were superintendents of asylums had never seen a permanent return of mental health among those who had once been committed as insane from this cause.

Next in order comes epilepsy. This is a disease like the last, which only occasionally and incidentally is attended with such a loss of mental control, as to necessitate the restraining of legalized insanity. As all effective treatment must be instituted early, it follows of necessity that those patients who drift into the lunatic hospitals, have passed the remedial stage, and have merely gone to the hospital as a safe home. The physicians who have previously treated these cases have

been the ones to cure them if any cure could be effected.

These three causes include at least one-fourth of all the cases admitted to institutions for the insane. The other causes of mental disease, as I enumerate them, will readily suggest those conditions in life with which the general practitioner is familiar, which he better understands than his brother in a hospital, who is separated from the social life and daily toil of his patients, and who must appreciate less keenly the trials to which these patients have been subjected.

Ill-health is too vague a term for special notice; the cases that are said to become insane from this cause, have usually been sick a long time with some chronic disease. The mind has not given way until they have suffered a considerable time from bodily ailments, and have therefore been under the care of one or more physicians. I have under my care now a case of phthisis pulmonalis, a young dry-goods clerk who has had the pulmonary disease for two years or more, but has exhibited signs of mind failure within the past two months only. Heredity is against this patient also, so that his case is hopeless; but it may be said, that where insanity results from prolonged ill-health of any kind it is seldom permanently cured.

Where *masturbation* is assigned as a cause of mental disease the same rule applies. There must have been prolonged physical deterioration in such cases and cures are rare. I have blistered the glans a number of times without benefit, and twice wired the prepuce in such a way as to prevent its retraction. In both of these cases the patient tore out the wire through the skin. Masturbation is sometimes regarded as a cause of mental disease, when it is merely a manifestation of it. I have in mind two such cases, in one of which the patient had spinal sclerosis, and in the other a brain tumor.

Overwork may be considered in this connection merely as a cause of ill-health. The ambitious brokers or merchants who will not give themselves proper rest do not excite our sympathy as much as does the poor needlewoman who works for a pittance and boards herself. Still all of these equally need judicious medical advice, and such advice at the proper time would save many, who are now incurably insane.

Puerperal cases are usually very curable. As the uterus returns to its normal state the mind also recovers its health. Both these

and all uterine cases are likely to receive early professional attention. But I do not think that insanity is often caused by uterine conditions of any kind. It has not been my observation, and I have been connected with an asylum where a great many examinations have been made by lady physicians with this object in view. In the reports of the Northampton and Worcester lunatic hospitals, to which I have referred, only four per cent. of the admissions are believed to have been made insane by uterine, menstrual or puerperal difficulties. Occasionally, however, we find a physician who thinks the uterus a very common cause of insanity in women.

Trouble, grief and disappointment are sometimes causes of insanity. Such cases seek a physician's counsel too seldom. No doubt Dr. Rip Van Winkle's advice "to unload the portal system" would cure many such cases in the incipient stage. The same may be said of *religious excitement*.

A farmer of my acquaintance lost his house by fire. It was partially insured, and he recovered his money. His barn remained, and he had more than enough money in bank to rebuild his house. Still he was greatly depressed, and one morning he hung himself. His wife, in this case, had added to his depression by complaints and scoldings. As there was no family tendency to insanity, there is no doubt in my mind that a little medicine with a change of scene for a few weeks would have set the man right.

Chronic mental disease has been often caused by injuries to the head. Frequently, no doubt, this result has been averted by promptly trephining over the seat of injury. In two cases of such injury, who had become epileptics, a complete cure was thus effected by Dr. Gay, of the Boston City Hospital.

The laws in Massachusetts and some other States are very stringent with regard to the admission of patients to insane asylums. Without questioning the wisdom of such laws which have for their one object the "protection" of the public against false imprisonment, they effectually shut out from the asylums many who require special treatment. They render it absolutely necessary that the incipient forms of insanity shall be treated by general practitioners.

Our attention has been much directed of late to the "prevention of insanity." Of course this means nothing more nor less than the removal of the cause. We have seen that these causes are simply ordinary diseases and

afflictions coming to those whose minds are susceptible to disease. Conventions may meet and talk big words about the prevention of insanity, but I do not see how anything can be done in this direction except by the personal attention to individuals in the ordinary walks of life.

There is obviously no specific for the prevention of insanity any more than there is for its cure.

A Unique Case of Pelvic Abscess.

PAPER BY DR. A. R. SMART, HUDSON, MICH.,
READ BEFORE THE DETROIT ACADEMY OF MEDICINE.

The subject of this sketch, Mrs. D., aged 24, of slight frame, weighing about 100 lbs., moderately developed, was married in January, 1881, and, although never very robust, was in good health. One month after marriage she had an attack of parotiditis. While recovering from this attack, and during or just at the close of a menstrual period, she was thrown out, by the overturning of the cutter, into a snow bank in the midst of a severe snow storm. Shortly after this exposure she was seized with pain in the pelvic region, attended with rigor, nausea, disturbances of the bladder and rectum, and other symptoms indicative of pelvic inflammation. The pain and subsequent swelling were more pronounced on the left side. The history for the next eight weeks is indefinite, as the case was in charge of an empiric. In July following I was called to see her, in consultation with her then attending physician, a gentleman in good standing in the profession. I found the lady much emaciated, pulse over 100, temperature 102; had suffered from night sweats, hectic, etc.; has a poor appetite, and is confined to the bed. In the left iliac fossa is found a circumscribed swelling, situated just above and internal to the internal abdominal ring, which gives a sense of fluctuation. This swelling, which is inflammatory in character, and is evidently an abscess, has been slowly forming for nearly two months, and was preceded by diffuse hardness and infiltration of the underlying structures; bowels are constipated, motions attended with pain, although but little swelling can be detected so far as the finger can reach in the rectum; in the vagina the uterus is found movable and but little displaced; high up to the left can be felt a swelling, giving a doughy sensation. Menses have not appeared since first attack. The patient being timid, and no

anæsthetic being at hand, opening the abscess was deferred a day or two, when it was opened. Instead of finding pus, I opened into a cavity formed in the walls of the abdomen, large enough to contain three or four ounces, and from which I could find no exit internally. An enema was ordered, which escaped at the opening in the abdomen. The patient was placed upon a tonic plan of treatment, a drainage tube inserted in the abscess, which was daily washed out with a carbolyzed solution. Pus soon commenced to escape at the external opening and from the rectum with the stools. Under this treatment the patient gradually regained her flesh and strength, the purulent discharge lessened, and in September following the menses reappeared. I next saw the patient in November of 1881. The discharge had nearly ceased from the external opening, only a very small sinus remaining, but having the characteristic opening denoting unsound structure underneath. A probe can be made to follow the sinus downward, inward and backwards, to a depth of nearly five inches. From this opening gas from the intestines escapes, and at each menstrual period a hemorrhagic discharge occurs coincident with the flow from the genitals. Pus seldom appears with the stools. Suffers pain in left side, and has colic and nausea, with slight febrile disturbance at menstrual periods. Continued general supporting treatment, with anodynes during menstruation and cauterized the sinus with probe armed with argent. nit. Condition slowly improved until May 1882, when the sinus had apparently closed. There was no discharge from it, or from the rectum; has still some pain and nausea at menstrual periods, though much less. No blood now appears externally; general health good. In December, 1882, acute cellulitis occurred, probably from exposure. The attack was of more than average severity; after about six weeks the acute symptoms had passed off, leaving a large infiltration on the left side, which filled up the lower part of the iliac fossa. In the vagina a dense infiltration occupied the left broad ligament and extended into the retro-uterine space. No softening could be felt at any point. A few days later the abscess opened into the rectum, high up near the promontory of the sacrum. This opening soon became closed, or nearly so, and pointing occurred in the Douglas cul de sac. At this point the abscess was evacuated by incision, just posterior to the cervix. A copious discharge followed, of offensive broken

down pus. A drainage tube was carried into the abscess, and its cavity daily washed out with carbolyzed solutions. About this time the external opening commenced again to discharge; pus and fluids thrown into the vaginal outlet would find exit at this abdominal opening. The abscess now had three points of exit, viz., in the rectum through the abdominal wall, and into the vagina. After the thorough use of carbolic acid in solutions of various strength, it was abandoned, and iodoform (15 to 20 grains) was thrown into the cavity through the vaginal opening, after the sac had been washed out. This was continued some weeks, when tinct. iodine was substituted. Under its use the cavity contracted, until in October, 1883, the vaginal opening had ceased almost wholly to discharge. There was occasional purulent staining of the stool, and at times some sero-purulent discharge from the abdominal opening. The hemorrhagic discharge at every month had reappeared at this opening and is now present at each menstrual period. Patient declined further treatment, and is at the present in about the same condition as when the treatment was stopped. She is in good general health, and carries on the business of a millinery store. She has some pain, soreness, and general disturbance at menstrual periods; at other times feels well. No doubt the protracted stubborn suppuration of the abscess cavity in this case was in part, at least, due to the communication with the intestine, by which it was kept poisoned. A point of great interest in connection with this case is the occurrence of a discharge from the abdominal opening, of a fluid, resembling the menstrual discharge and occurring coincidentally with it. Finally, a query of importance to the patient as well as to our selves: Can the abscess cavity be obliterated?

Proceedings of Societies.

Detroit Academy of Medicine.

JANUARY 22, 1884.

The academy met at the office of Dr. Noyes, Dr. Bradley presiding.

There were present also several gentlemen representing the Detroit Pharmaceutical Society, who were introduced to the academy. Being invited to state their special business, Mr. A. B. Stevens, in behalf of the delegation, said that at a recent meeting of the Pharmaceutical Society the subject of a syrup of

yerba santa had been discussed and a formula had been adopted which they desired that the physicians and pharmacists of Detroit would agree to prescribe and dispense. There is no official formula for this syrup, which is, however, quite frequently ordered. The formulas given by different manufacturers of fluid extracts differ widely one from another, and many of them give products which are either unsightly or quite unsuited to the uses to which this syrup is generally put. The formula recommended employs ammonia as the alkali, by the agency of which the resinous acid of yerba santa is brought into a soluble condition. The proportions adopted are:

Strong water of ammonia.....	4 parts.
Fl. ext. yerba santa.....	100 "
Syrup	1000 "

The syrup thus made contains in a pint about two fluid ounces of the fluid extract.

Dr. Carstens: The syrup of yerba santa is the best vehicle we have for quinine. It covers the bitterness of the alkaloid so effectually that even children take the mixture readily. I move that the proposed formula be accepted by the academy.

Dr. Cleland: Is there not something that will disguise the bitter after taste of quinine?

Mr. Stevens: I prefer myself a preparation of licorice as a vehicle for quinine—a syrup made with ammoniacal glycyrrhizin is quite as effectual as the syrup of yerba santa, and it is at least equally pleasant.

Dr. Lyons: The taste of yerba santa is objected to by some. To many however it is not only not disagreeable but is positively pleasant. There are few who object to licorice. It is believed that yerba santa produces its remarkable effect of rendering quinine almost tasteless by forming with the alkaloid an insoluble salt, resembling the tannate. Some indeed have affirmed that yerba santa acts by virtue of the tannic acid it contains, but this is a mistake. The principle it contains bears in fact no close resemblance to tannin, and it is not at all certain to my own mind that it forms any insoluble quinine salt. I am inclined rather to believe that it resembles in its action the glycyrrhizin of licorice root, acting in some way not explained to obtund the sense of taste. There is prepared an aromatic syrup of yerba santa which answers admirably as a vehicle for quinine, and few complain that in this combination the yerba santa is disagreeable.

Now, in regard to the adoption of the formula proposed, I wish to say this: any action we may take is only local and provi-

sional. The U. S. Pharmacopœia is the only standard which has binding and universal authority. If for our own convenience we adopt for temporary use a formula like that under discussion it should be with a distinct understanding that it is only a temporary expedient. We should select such a formula as we may reasonably expect will commend itself for ultimate adoption in the pharmacopœia—and we may be sure that our formula will not be so adopted if it sets at defiance general usage or violates sound pharmaceutical principles. In the next place, if we decide to adopt the formula proposed, we must remember when prescribing this syrup to specify the formula. It is not enough to write syrup *yerba santa*—we have just been told that there are many formulas for the syrup, and differing widely in strength and physical properties. We must write every time syrup *yerba santa*, *formula D. P. S.*, until every druggist in Detroit has learned what that means, and habitually dispenses that article. Physicians are too careless about these things. They will write, at the suggestion of some drummer for a manufacturing firm, A's Elixir Phosphorus Co. or B's gelatine coated pills, etc., etc., but often their ideas as to what is and what is not "official" are hazy in the extreme.

Dr. Noyes: I do not see that we have any authority to act in such a matter as this.

Dr. Carstens: It is certainly very desirable that we should have uniformity in the medicinal preparations we prescribe. If our patients get the same prescriptions filled at half a dozen different places, and it is not twice the same in appearance they will think there is something wrong—and they are about as likely to lay the blame on the prescriber as on the dispenser. It is in order to prevent the necessity of explanations which rarely quite satisfy our patients, that the pharmacists of the city have taken the action they have in this matter, and to this end they ask our co-operation. I think we should trust to their judgment to select the best formula, and should uphold them heartily in their action, and give them besides our thanks.

Dr. Noyes: I propose, as an amendment to Dr. Carstens' motion, that the Academy thank the gentlemen for their suggestions in regard to the formula, and that they agree to adopt, in prescribing, such a designation for the syrup as the Committee may decide upon. The amendment having been accepted by Dr. Carstens, the motion was put and carried.

WRITTEN COMMUNICATIONS.

Dr. Gilbert read a paper bearing on lacerations of the perineum, as the result of the use of the obstetrical forceps.

Dr. Spalding: It has long been my feeling, as most of the members of the Academy know, that the forceps are too frequently used. I do not mean to say that they are not sometimes needed, but their use should, in my judgment, be confined to the cases in which delivery cannot be effected without them. My own observation has been that lacerations of the perineum are much more frequent when they are used than when they are not. I believe that no skill in their use will prevent these accidents. It will be said that the cases in which the forceps are used are, as a rule, those in which rupture of the perineum is most likely to occur, and there is some force in this objection; still, I think it is apparent to any unbiased mind that the use of instruments can only increase the risk. It is hardly possible to apply the forceps without increasing at some point the tension that is already extreme, and rupture is a frequent result.

The subject of lacerated perineum has been to me as great a bugbear as any in obstetrical practice. I have had great difficulty in deciding just when to operate and when not. I have employed the various methods of procedure recommended by the different authorities, but I must say I have not been satisfied with the result of operations. It is the habit of some to operate whenever there is the slightest amount of laceration. My own experience and observation have led me to believe that unless the perineum is completely ruptured it is better to leave the case to nature. I think the injurious effects of slight ruptures have been greatly exaggerated. I do not see how prolapse can result. The womb does not rest on the floor of the pelvis, but is suspended by ligaments.

Dr. Cleland: I do not agree with Dr. Spalding in his views with regard to the use of the forceps. It is at least a fact that since the forceps came into use the percentage of deaths of women in child-birth has been greatly reduced, and that with the more frequent use made of the instrument in late years, the mortality has still further diminished. It is true that lacerations of the perineum have been more frequent, but this is a matter of secondary importance, and the means of dealing with lacerations have likewise been greatly improved, so that the acci-

dent is less grave in its consequences than formerly. In regard to operating I incline to think that it is not so important as some would have us think. I have seen some cases of severe and extensive lacerations, which have recovered perfectly without operation. I had one case some fifteen months ago, in which there had been a very long, hard labor. There was laceration extending around the anus; although not involving the sphincter there was much contusion. The woman was much exhausted, had lost much blood, and it was too dark besides, to operate at once. Day after day passed, and one thing or another caused postponement of the operation, so that finally it was not made at all, and subsequent examination has shown that union was as perfect without, as it could have been with an operation. When the sphincter is uninjured, and the parts are in comparatively a normal condition, I believe, indeed, that repair will usually take place.

Dr. Maire: I agree with the gentlemen who have spoken, as regards the power of nature to repair injuries to the perineum. I have seen good recoveries without operation. I do not believe in the practice of tying the patient's legs together. My first case of rupture I treated according to the books. I put in silver sutures, tied the legs together, and kept the patient several days subjected to unnecessary discomfort.

One idea I got from Dr. Spalding, which I think is of value. It is that the patient need not be confined a long time to the bed. She may be permitted to get up and even go about her work as usual, and results I find as good as when she has been confined to the bed.

Dr. Gillett: The immediate bad effects of laceration are not very important, but I believe the remote ones are. I think much of the backache, etc., of which women complain, may be traced to weakening of the perineum. One case of pronounced hysteria, I think, was due to this cause. If the perineum has a function in supporting the pelvic viscera, and indirectly the uterus itself, any injury to it must have grave possible consequences, and the physician's duty is to guard as far as possible against them.

Dr. Wyman: Dr. Gilbert made one good point in his paper. He remarked that in the mechanical arts one can calculate to a nicety the value of the forces involved. But not so in the act of parturition.

It is a fact that lacerations occur with and without the use of the forceps. I do not

think the forceps, skillfully used, will occasion them. I do not think the consequences of laceration as affecting the support of the pelvic viscera so important as is the prompt healing by first intention, of injuries occurring during delivery. The patient is in greater danger from septic infection where surfaces are left exposed, from which absorption may take place. I regard it for this reason as important that the parts be brought into close apposition at once by sutures. I believe in operating at once. If for any reason this is impracticable, antiseptic measures must be faithfully carried out. To this end I would not deluge the uterus with water. I prefer application of antiseptic cotton, etc.

Dr. Carstens: Dr. Wyman has stolen all my thunder. I wished myself to say that a raw surface left exposed, increased greatly the danger of septic infection. I do not agree with Dr. Spalding in the view that a weakening of the perineum does not cause falling of the womb. It does not always have this sequel. The anatomical configuration in individual cases modifies the result. I have seen bad cases of rupture which were not operated upon, and which healed only by granulation, when there was yet no sign of prolapse, but such cases are exceptional.

The question whether to operate at once or to wait, is one concerning which there are differences of opinion. Operations made at once sometimes succeed, but sometimes also fail. I have studied to find out the causes of failure, and I believe I now understand them. If the operation is made while the parts are greatly tumefied, as swelling subsides the sutures becomes loose—the surfaces are no longer held in close apposition and the operation fails. Now if a suture can be devised which can be tightened up from time to time, we may overcome the difficulty. This is accomplished by means of sutures provided with a number of shot. At first only the outermost shot is compressed; when tumefaction subsides and the suture becomes loose, all that is necessary is to draw the suture tight, and compress the second shot, and this may be repeated day after day until the parts have returned to their normal condition. I have tried this plan, and, so far, I have had reason to be satisfied with the results.

Dr. Yemens: The only regret I have about the paper, is that the writer does not give us papers more frequently.

The conditions which demand the use of the forceps are those which may cause lacerations. Rupture often results from delaying

too long the application of the forceps. It must be noticed that rupture is often produced during the delivery of the child's shoulders, the head having been born without mishap. This happens not unfrequently in forceps deliveries, but the forceps cannot be accused of having occasioned the accident.

I have not been in the habit of operating at once on a ruptured perineum. I do not find septicaemia common among my patients. I do not see how the danger of septic infection is materially lessened by this operation. I would like to know whether, in fact, septicaemia is more frequent where the operation is not performed.

Dr. Wyman: Dr. Thomas, of New York, states that in numbers of cases in which the operation was made early, septicaemia has been averted.

Dr. Yemans: It is easier to say that, than to demonstrate it. It seems to me that an operation would increase rather than diminish the danger of septic infection. I regard the operation of episiotomy, or slitting the vulva, a great safeguard against rupture of the perineum in forceps deliveries.

Dr. Noyes: I have already expressed my views on this subject. I am surprised at the different opinions that have been presented here in regard to the importance of the perineum as a support to the pelvic organs. I have always advocated sewing up the perineum. If the parts are much bruised or oedematous, you are likely to have a failure. You must put in your stitches deep. Clean the surfaces thoroughly before you bring them together, and do not be in too great haste—allow the plastic-lymph to exude before bringing the surfaces together. The shotted suture, which Boseman devised many years ago, is the original form of the sutures described by Dr. Carstens.

Adjourned.

Jan. 29, 1884.

The Academy met at the office of Dr. Cleland, Dr. Bradley presiding.

Dr. Wilson, alluding to the subject of syrup of yerba santa, discussed at the last meeting, said that in his judgment alkalies should not be employed at all in preparing this syrup. Where alkalies are used there will be decomposition of the sulphate of quinine, with precipitation of the alkaloid. A syrup can be made by the use of carbonate of magnesia, in precisely the same way that the officinal syrup of tolu was formerly made

from the tincture, and a syrup prepared in this way is effectual in covering the bitter taste of quinine.

WRITTEN COMMUNICATIONS.

Dr. Gilbert read a paper introducing the subject of discussion continued from last week. (See p. 6). In connection with the paper, he offered a practical demonstration of the difference in the action of silk and of wire sutures, the former tending to assume, when drawn tight, a circular, the latter an oval form.

Dr. Cleland: The doctor's paper to-night is eminently a practical one. He directs attention to one subject which I deem of great importance, viz.: the prophylaxis against ruptures of the perineum. There is one class of cases in which there is especial danger of rupture; the labor is slow, the os dilatable but not dilated, the head still high, and the woman becoming exhausted. The forceps can be used only at a disadvantage, and when made in the usual form, cannot be introduced without crowding back the perineal tissues. For this class of cases I devised, some years ago, a modified form of the forceps, which I here exhibit. You will observe that the blades are very narrow and more curved than usual; the general curve of the instrument is greater, describing a larger segment of a circle, while the middle portion of the instrument is unusually slender, the shanks closely approximating one another throughout the greater portion of their length.

Dr. Spalding: The paper has covered the ground so completely that it leaves little for me to say. I wish to add my testimony in favor of the form of forceps devised by Dr. Cleland. They not only accomplish admirably that for which they were designed, but they also secure a better grasp of the head than other instruments, and I have seen them successfully employed when Elliott's forceps had failed.

Dr. Wyman: There is one point especially important in operating on a lacerated perineum, where the sphincter is involved. There is danger that the sutures introduced will act so as to cause a gaping, internally, of the posterior portion of the wound, forming thus a *cul de sac*, in which blood and the lochial discharges will be retained, increasing the risk of septic infection. To obviate this difficulty I introduce the first suture very deep in the posterior portion of the wound, and having brought this portion nicely into

apposition, I proceed to introduce the remainder of the sutures in regular succession, until the entire wound is closed.

Dr. Poole: I have nothing to say except to express my obligations to the doctor for his very interesting and instructive paper. The value of the Academy to us who are young in the profession consists largely in the opportunity it thus gives us to gather the fruits of wider experience and research than our own.

Dr. Connor: I am not so sure as some members of the Academy appear to be about the danger to puerperal women of septic infection through lacerated surfaces. There must be always an extensive raw surface where the placenta has recently been detached, yet septic infection is the rather rare exception. In my judgment, much depends on the condition of the patient, and more attention should be paid to increasing her constitutional powers of resistance, than to the attempt to prevent absorption by diminishing—slightly—the surfaces by which it may take place.

It does not seem to me to be possible to close a wound so completely by sutures as to prevent the lochial discharges from penetrating it, and coming in contact with the surfaces.

There has been recently a good deal of discussion among the physicians of New York, in regard to the propriety of washing out the uterus after delivery. Dr. Thomas is opposed to it, while others favor it.

Dr. Wyman: The object of operating is not simply to close the wound mechanically, but to induce primary adhesion, or healing by the first intention, and so prevent the possibility of infiltration, or septic absorption at a later stage.

Dr. Cleland: A case I have recently had illustrates Dr. Connor's point, viz., that the condition of the system is an important factor in the causation of septic poisoning. The patient was a butcher's boy, who, while engaged in his usual work, cut his hand slightly. The accident ordinarily would have been considered a trivial affair, but in his case septic infection resulted, with a fatal termination.

Dr. Wyman: If it were true that septic matter may be generated from spontaneous decomposition of blood, etc., and absorption of the products, we should expect to see women often showing signs of such poisoning at the menstrual period, but this is an exceedingly rare occurrence. I have myself found that it was almost always possible to trace septic infection to some definite foreign source. Yet, of

those who are certainly exposed to the same risk, we find a small proportion only affected with septicæmia.

Dr. Connor: We are driven more than ever to the conviction that, even when infectious and contagious diseases are in question, the constitutional condition of the subject is of prime importance. The germs of micro-organisms are everywhere present; they must find a suitable nidus in order to develop.

Dr. Cleland moved that Dr. Connor be requested to prepare a paper on the conditions favoring the development of micro-organisms.

Dr. Connor amended the motion, changing it to a request that Dr. Yemans discuss, next week, the specific subject of puerperal sepsis.

Dr. Cleland accepted the amendment and the motion was carried.

VERBAL COMMUNICATIONS.

Dr. Spalding: I have observed for several months past an unusual number of miscarriages; others have spoken of the same thing. I have found it impossible in many of my cases to prevent the abortion, by adopting the measures that usually are successful. Is there any cause assigned for such an epidemic, so to speak, of abortion?

Dr. Wyman: Veterinarians recognize, I believe, epidemics of this kind among animals, and they have been made the subject of special investigation in Europe.

Adjourned.

Feb. 5, 1884.

The academy met at the office of Dr. Wyman, the president occupying the chair.

DISCUSSION.

Discussion on the subject of puerperal sepsis, was introduced by Dr. Yemans:

In our discussion of rupture of the perineum as affording opportunity for absorption of septic matter, we have overlooked other avenues through which this might equally take place. There may be lacerations of the internal as well as of the external portions of the parturient canal. The source or mode of the infection, however, we cannot always trace. I have within a few months had two cases, a brief account of which may serve to introduce the subject of the evening. The first was that of a young woman, who had been under the charge of another physician. She was about six months advanced in pregnancy, and as the result of the use of a probe,

she miscarried. Whether this effect were produced intentionally or not, I cannot tell, but the other physician suddenly deserted the case when the abortion occurred, and it thus came into my hands.

The second case showed no untoward symptoms until the fifth day after confinement. There was then a quickening of the pulse and an increase of temperature. There was no distinct initiatory rigor, but there were chilly sensations, followed by profuse sweating. The lochial discharge became offensive, finally very much so; there was very severe headache, and the characteristic neuralgic pains. This patient is now convalescent. She did not at any time have a high fever; the pulse was not above 100, and the temperature not very high. I cannot trace infection in this case to any external source. I have not myself dressed any wound, or been near any, nor have I attended any cases of septic disease. One can hardly avoid the conclusion that cases like this are autogenetic.

Dr. Fordyce Baker objected to the term puerperal fever. He held that under this name several distinct pathological phenomena were confounded. He preferred to distinguish these, discriminating metro-peritonitis and pelvic cellulitis, from puerperal septicæmia.

Another authority holds that septicæmia may arise in different ways. 1st. By inoculation from without; 2nd, by absorption of septic matter, spontaneously developed in the decomposition of traumatic products. Besides these he makes a third class of sporadic cases, not autogenetic. An epidemic of puerperal fever would seem at first sight to be an impossibility. Yet at this very time there are in Detroit numerous cases of this kind, and not confined to patients attended by any particular individual. May not the miscarriages of which Dr. Spaulding spoke at our last meeting, be due to the same cause.

There are some pathologists who regard puerperal fever as a specific disease, due to a specific cause.

As regards methods of inoculation, the accoucheur, the nurse, the syringe or sponges, or instruments, may any of them serve to convey the poison, and the strictest antiseptic precautions in regard to all these ought to be observed habitually.

Sometimes a portion of the placenta is left in the womb, and in its decomposition may produce trouble. I feel sure that in the cases

I have related this was not the origin of the septic poison, but whence it did come, I am unable to determine.

Dr. Wyman: It seems to me a little singular that while as surgeons we take such strict antiseptic precautions, in the treatment of all wounds and surgical operations, in the management of the lying-in room we often neglect to carry out the same precautions, and then express surprise when we have a case of septic infection. There is always more or less laceration, and if we use every means to prevent the access of germs to every other wound, we should be not less particular in the case of a parturient woman. But if it be true that a certain constitutional condition is an indispensable prerequisite for infection, we should none the less exercise this care. The prophylactic measures, which in ninety-nine cases would be superfluous, would in the hundredth save the life of our patient, and since she is intrusted to our care, we are bound to leave nothing undone which may secure her against harm.

Dr. Gilbert: Dr. Yemans made a good point when he said it is well to discard a name if it does not express a definite thing. There is certainly an important distinction between puerperal peritonitis and puerperal septicæmia. Until I came to Detroit I was unacquainted with septicæmia.

I am skeptical about the origin *de novo* of bacterial germs. Virchow has shown that in pyæmia, so called, there is no absorption of pus as pus. Septic disease depends on the increase and multiplication of micro organisms, but bacteria are concomitants not the cause of the disease. That the disease involves vital activity of some sort is shown by the fact that the high temperature is maintained even after the patient's death. It is certain that antiseptics will prevent the development of the living cells, which are the essential characteristic of the disease. Hence the value of the agents where septic trouble is anticipated. My practice is in all cases where there is retention of any portion of the placenta, or other cause for apprehension of autogenetic septic infection, to order the woman to wash out the vagina thoroughly with carbolated water.

Dr. Duffield: I had an opportunity while in Vienna of seeing several post mortems after deaths from puerperal eclampsia and peritonitis. There was much œdema and engorgement of the pelvic viscera. The uterine veins were distended with blood. The peritoneum was in a hyperæmic state. There was

effusion of serum into the peritoneal cavity. The abdominal walls were distended. On opening the abdominal cavity, the stench was intolerable. There were minute (microscopical) abscesses in the lungs, kidneys, spleen and liver, and even in the substance of the long bones.

The pathologists there regard the disease as autogenetic. They take no precautions whatever to avoid inoculation. They will handle a putrid cadaver, and go immediately to the lying-in room, doing nothing more than to wash their hands.

Dr. Gilbert: One more remark of a practical character. If we pay too much attention to ourselves as carriers of contagion, we will miss the mark, for we shall do nothing to guard the patient against septic poisons autogenetic in origin.

Dr. Connor: I believe that if we could have the care of the woman through her pregnancy we would have fewer cases of puerperal fever. If we could so instruct our patients that they would look to their physician for counsel in all hygienic matters, we would be able to give better real value for our services than when we are called in to try to repair damages resulting from neglect or folly.

Another thing that strikes me is that if the gathering of people at a funeral involves danger of spreading infection, it may be possible that the physician who is brought in contact with all kinds of disease may be the means sometimes of conveying infection from one patient to another, and he should realize to the full extent the awful weight of the responsibility which he assumes when he takes charge of an obstetrical case.

Dr. Noyes: I think with Dr. Connor that the physician can do his patients more good when they are well, or seem so—than when they are sick. I have seen cases of puerperal eclampsia which would have been foreseen and averted, had the physician been able to keep the patient under observation during pregnancy. In my earlier practice I was called to see a woman in convulsions. I bled her, and gave chloroform, and by active measures saved her life, as I believe, but had I seen her previously, the patient would, in all probability, have escaped the dangerous attack.

In old times they talked about "metritis," and "metro-peritonitis," and "metro-phlebitis."

I have had some cases of septic poisoning. I remember one case of a woman previously healthy, who died from an offensive discharge

which dated from the time of her last confinement. The old doctor who attended her said she had cancer of the womb. After her death her husband demanded a post mortem examination. It was made, and there was found in the womb something which the old doctors declared was the cancer, but which to us younger ones seemed very much like a portion—and a very considerable portion—of a placenta.

Now, in regard to the carrying of poison by aconcheurs, it seems strange that there should be such discrepancy of opinion on the part of authorities. Dr. Meigs did not believe that puerperal fever—or anything else—was contagious. He was scrupulously careful as regards personal cleanliness, but he did not believe that there was any specific infection which could be carried to the lying-in room. There appears to be even to this day a lack of unanimity of view in the profession on this subject, but it seems to me that it is wise to err on the side of caution. One should submit his patients—and this class of patients above all—to no possible risks. A surgeon in particular, who is treating suppurating wounds should hold himself responsible if his services as obstetrician serve as a prelude to those of the undertaker.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

JUDSON BRADLEY, M. D.,
President.

The Nineteenth Meeting of the Michigan State Medical Society.

The first meeting of this session opened at Power's Opera House, in Grand Rapids, June 11th, at 10 A. M.

After some congratulatory remarks by the President, Dr. A. F. Whelan, prayer was offered by Rev. B. F. Sargent, and an address of welcome by the Mayor of the city, Hon. C. E. Belknap. About one hundred members answered to their names. The Executive Committee reported an order of exercises including entertainments. Under the head of Reports of Standing Committees, Dr. Maclean read the reports of some cases and exhibited patients, showing the results of operations and treatment. Some points respecting the treatment of Colles' fracture, were discussed by Drs. Walker, Shurly, Tupper, McGraw. Then Dr. Pratt remarked that there had been a misunderstanding of the duties of the Committee on Surgery. This Committee, and

others like it, were simply instructed to examine the several papers belonging to their respective departments, and report for reading such as seemed fitting, and return the others to their authors.

Adjourned till half-past one P. M.

Pursuant to adjournment, the Society was called to order by the President. Dr. S. P. Duffield, read a paper upon "Expert Testimony." The writer sought to show that expert testimony should receive proper money compensation. In a case in which he was involved, the supervisors of a town did pay two hundred and fifty dollars, rather than carry the case to the Supreme Court. Dr. Pratt called attention to the fact that the ends of justice would not be reached unless the laws could be so changed that the expert should testify for the Court, rather than for one party or the other in the contest. This is doubtably the great reform needed in all expert testimony.

Dr. C. J. Lundy read a paper upon the "Dry Treatment of Suppurative Inflammation of the Middle Ear." Dr. Leartus Connor suggested that in many cases the thorough packing of the powdered dry boracic acid in the ear had enabled him to reach a cure sooner than by blowing it loosely into the ear. Farther, the using of tannic acid, with the boracic acid, in certain cases, enabled him to relieve cases that could not be relieved by the pure boracic acid.

Dr. H. McCall said that in the special cases in which the boracic acid became moist too soon, the injection through the catheter of warm water through the Eustachian tube and middle ear, had so altered the condition of the parts that the boracic acid remained dry, and a good result was speedily reached.

Dr. A. F. Whelan now gave his annual address. He dwelt upon the history of medicine from the earliest times till now. From little beginnings he showed how great results had been reached. On motion the chair appointed a committee of five to nominate all officers except the president.

Dr. C. George read a paper upon the "Use of Turpentine in Diphtheria." His experience in the use of this drug has been very satisfactory. Also from various sources he obtained arguments in support of the reasonableness of this use of turpentine.

A paper was read by Dr. Walker which attracted considerable attention.

A thoughtful paper was read by Dr. McGraw upon "The Diagnosis of Tumors."

The border line between benign and malignant tumors was carefully drawn in the light of clinical and pathological investigation.

Dr. A. B. Palmer presented a paper upon "Treatment of Enlarged Prostate by dilatation." It seemed to the writer that such dilatation as that proposed would be more likely to distend the membranous urethra than the hypertrophied prostate.

On motion the society adjourned till 8:30 tomorrow morning.

Pursuant to adjournment the society was called to order by the president.

Dr. G. K. Johnson offered a resolution calling for the appointment of a committee on the re-organization of the society. He said that many were dissatisfied with the present rules of organization, and thought that with judicious changes better and more satisfactory work could be accomplished in the society. The resolution was carried, and the president appointed as said committee: Chairman, Dr. G. K. Johnson, of Grand Rapids; A. W. Alvord, of Battle Creek; H. McCall, of Lapeer; W. F. Breakey, of Ann Arbor, and Leartus Connor, of Detroit.

On Motion of Dr. Foster Pratt, a committee of five was appointed to represent the society at the legislation which might be introduced at the next meeting of the State Legislature.

Dr. Pratt was made chairman.

On motion the report of the committee appointed to nominate all officers except president, was now heard and adopted.

Vice-Presidents—J. Perkins, Owasso; J. M. Cook, Muskegon; Gordon Chittock, Jackson; Carl Brumme, Detroit.

Secretary—Geo. E. Ranney, Lansing.

Treasurer—A. R. Smart, Hudson.

Judicial council—F. R. Owen, Ypsilanti; C. V. Tyler, Bay City; H. McCall, Lapeer.

Delegates to American Medical association—Wm. Brodie, Detroit; H. B. Baker, Lansing; J. H. Bennett, Coldwater; J. B. Book, Detroit; W. F. Breakey, Ann Arbor; C. Brumme, Detroit; J. H. Carstens, Detroit; S. H. Clizbee, Coldwater; L. Connor, Detroit; E. S. Dunstan, Ann Arbor; S. P. Duffield, Dearborn; S. S. French, Battle Creek; A. D. Hagadorn, Lansing; H. O. Hitchcock, Kalamazoo; G. K. Johnson, Grand Rapids; D. Maclean, Detroit; H. McCall, Lapeer; F. M. Oakley, Ypsilanti; F. K. Owen, Ypsilanti; A. B. Palmer, Ann Arbor; F. Pratt, Kalamazoo; G. E. Ranney, Lansing; W. F. Sigler, Pinkney; H. B. Shank, Lansing; E. Snow, Dear-

born; C. F. Southworth, Monroe; H. Tupper, Bay City; C. V. Tyler, Bay City; D. W. C. Wade, Holly; A. F. Whelan, Hillsdale; Chas. Shepard, Grand Rapids.

Voting for the president being in order, Dr. Donald Maclean was elected. He received 126 votes, and Dr. French 63. There were some 77 new members added to the society.

The society decided to hold its next meeting at Port Huron, at the invitation of Dr. Mills.

Dr. E. P. Christian, of Wyandotte, read a paper, giving his own experience in the management of placenta previa. As this experience extended over more than 30 years, and had been full of obstetric work, the paper was of much interest.

Dr. Chas. Shepard, of Grand Rapids, gave the histories of several interesting cases of diseases of women.

The society then adjourned till 1:30 P. M. Pursuant to adjournment the president called the society to order.

Dr. R. J. Kirkland read a paper on "Aural Catarrh." He gave its general characteristics, and general treatment, with care and accuracy. Dr. Connor suggested that every general practitioner should notice any failing in the hearing of his patients, and if he should find this reduced so that an ordinary watch could not be heard farther than a foot from the ear, he should look into the cause of the loss of hearing to the end that the hearing might be saved. The insidious nature of nonsuppurative inflammation of the middle ear and the hopelessness of treatment after the tissues had been destroyed, rendered watchfulness especially needful in order to prevent such destruction. Dr. J. F. Noyes from his own observation emphasized the necessity of the profession exercising greater care in regard to these cases. Dr. Smith thought that every practitioner should treat these cases, using a bulb of a Davidson syringe to inflate the middle ear, if nothing better could be had. Dr. Lundy thought that other treatment than the air douche merely would be of service, and he commended a special line which he had found useful.

Dr. A. W. Nichols read a paper on "Nasal Catarrh." It gave a brief account of the disease, and the means at our disposal for its effective treatment.

Dr. E. Smith read a paper upon his experience in the use of jequirity in treatment of granular ophthalmia.

The usual votes of thanks were given all who had contributed to the success of the meeting.

Prominent among these were Dr. and Mrs. Shepard. On Wednesday evening they gave a very elegant and enjoyable reception to the society at their spacious house.

The Peninsular club tendered the freedom of their house during the session. The Grand Rapids and Indiana Railroad gave a special excursion to the society to Traverse City and return. A special train of parlor cars was placed at the disposal of the society.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Trouble with the Association Medical Journals.

Medical journals under the direct management of large medical societies have ever had a stormy career. The oldest and most successful of these—the journal of the British Medical Association, has just passed a squall. A correspondent of the *Medical Record* gives the following:

"It seems that certain members thought themselves outraged by the small amount of space accorded them in the pages of the journal. Hence fifty-three of them called for an extraordinary general meeting of the association, to consider their grievances. They called for the meeting in London, but the officials, for some reason, thought best to call it in Birmingham. This was a shrewd move, for the fifty-three stayed at home, as the officials probably intended they should. Thus the managers put down this discontent for the present. The editor of the journal was present at the meeting of about twenty-six persons and made a statement which they could not oppose. Thus the journal management is still ahead, but such like disturbances as these are frequently occurring.

The Journal of the American Medical Association, in the space of less than a year has been most violently attacked. That it will continue to be so as long as it is published all may be sure. It is this element in its management that is its weakest point, so that with many it is a doubtful question whether the enterprise can be long maintained. As an illustration of the methods employed is the following: As the facts have all been pub-

lished and a portion of them over the writer's signature, there can be no disagreement as to facts. Dr. Packard, of Philadelphia, a member of the Board of Trustees, saw fit to present his grievances to the medical profession by means of a circular letter, before he had presented the same to the board itself, at one of its meetings. Usually it is regarded as simple courtesy to a board that any dissatisfaction of one of its members should first be presented to said board, at one of its meetings, and then if the member is denied a hearing and does not accomplish that he desires, he may appeal to the members at large. This courtesy Dr. Packard did not accord to the Board of Trustees of the Journal of the American Medical Association. Of course he has a perfect right to pursue this course, if it seems wise for him so to do. But in the circular letter he tells the profession that the journal is in debt, how much he does not say, but friends of his say that he stated that it was \$6,000 in debt. This was a grave charge to make against the management of an enterprise of the nature of the one considered. But the report of the president of the board of trustees showed that the journal was not in debt—farther, that it had money enough to meet all the expenses of the Journal to the end of the journal year, allow \$1,000 for the expenses of the Washington meeting, pay the sums appropriated for scientific work, and still have \$500 for a reserve. Thus it appears that Dr. Packard's statement as to this point was entirely unfounded. Now if one of his statements be unfounded, what shall be said of the rest? He attacked the judgment of the board of which he is a member, but he was unable to bring facts and figures to show that the journal could be published better at any other place, and with any other editor. Nor did any other person make such an exhibit of favorable place, and editor and publishing house as to impress the board that a change could be wisely made. The board was ready and willing to consider any change which could be supported with facts and figures, to show that it was a wise and safe change to make. Chicago and Dr. Davis were chosen as place of publication and editor because by facts and figures these were shown to be entirely trustworthy, and as sure not to leave the management in debt and in other unpleasant difficulties.

When the facts of the case are looked squarely in the face, we submit that all unprejudiced minds will say that the manage-

ment of the association journal did the best for all concerned. What are the facts? First, the income of the association for several years previous to the starting of the journal, had averaged about \$5,000. Second, the management of the journal in one year increased this income to over \$8,000. In short, the journal added to the income of the association in one year \$13,000. Is there, or has there ever been, a medical journal which has taken in cash the first year of its publication \$13,000? It may be that there is, but the fact has never come to public knowledge. Third, it more than doubled the number of paying members of the association during the first year. All permanent members wanted the journal and hence they paid their \$5.00. Fourth, every dollar received from subscribers has been applied to the conduct of the journal. The association has got back all of its \$18,000. The trustees would have been pleased had they been able to give their subscribers a journal costing \$50,000, but without running the association in debt this could not be done.

We have no doubt that the trustees of the journal are entirely willing to step down and out, and give place to any other set of trustees which the association may see fit to select. Certainly the time and trouble and thought and expense attendant upon the performance of their duties are so considerable, that they would rejoice in committing their trust to others. But while they remain trustees, they should do their best for the journal that is possible with the means at their disposal. They are all practical men and are quite sure to bring a practical common sense to the discharge of their duties.

No persons understand better than they that the journal is not all that is desired. All they claim is that it is the best which could be done under existing limitations. As with time and accumulated resources these limitations disappear, so will the journal gradually approach the standard which they have before them. Great and strong things are reached only by growth, and growth requires time. Our personal desire and aim is to do what lies in our power to make the journal the adequate representative of the American Medical Association. Patience and persistence in the line of a steady policy will be sure to win ultimate success. A flickering, changing policy will work speedy ruin. We suggest that each person who has any facts or ideas by which he thinks that the association journal can be improved, forward the same either to the president of the board of

trustees of the journal, Dr. J. M. Toner, of Washington, or the editor of the journal, or any individual member of the board. We are certain that all such suggestions will be courteously received, their contents considered, and in so far as practicable, put into execution. Farther, we trust that hereafter members of the board of trustees will present their views as to the changes needful, first to the board for consideration in open meeting. If then they find themselves misrepresented by the action of the board, they can appeal to the profession by circular letter, or to the general meeting of the association.

The Late Meeting of the Michigan State Medical Society.

A brief account of this meeting is given in another portion of the LANCET. That it was satisfactory to the friends of the society—those who have made the society what it is—cannot be said. That the general conduct of the meeting was decorous is true. Dirty linen was mostly washed in private. There were papers in quantity abundant, and the quality of several was very excellent. In fact, quite as many papers were either read by title or taken home without their titles being read, as were presented in open meeting. The arrangements of the society did not provide for the reading of the papers offered. This should be remedied as speedily as possible.

The time at the society's disposal did not admit of any sufficient discussion of the papers read. In a large general body such as this it is simply impossible to enter upon discussions of papers. Then some papers were outrageously long. In fairness to all no paper should exceed twenty minutes in length. Had this rule existed and been in force, many more papers could have been read. But the worst feature of the society is, that its organization admits of its being used for ends quite personal and entirely foreign to the interests of the body of the profession who have done the work which makes the society what it is. Its rules of membership admit all persons who are regular practitioners, if recommended by two regular physicians. Hence it has happened on several occasions that certain individuals have gathered up a horde of recent graduates who had no interest in the society, brought them to the meetings and made them members, and secured their votes. Is

it not true that this method of procedure has gone far enough? How can it be prevented?

Such are some of the obvious evils of lack of organization in the Michigan State Medical Society. We hazard nothing in the statement that these evils are fatal to the adequate development of the real character and attainments of the profession of Michigan. The State Society does not now place our State in its proper place before the general medical profession of the world. Two courses are open to it. One calls for the abandonment of the present organization and the formation of a new one. The other calls for a reorganization of the old one in such a manner as to remedy the acknowledged evils. Which is the wiser course? In either we think that the following features would correct many of these evils, if not all:

(1) The membership of the society should be divided into delegates and fellows. The latter to bear the same relation to the society that permanent members do to the American Medical Association. The former to be selected from each local society in the State in the proportion of one delegate to five members, with appropriate limitations where one member belongs to several local societies. All matters of legislation, election of general officers, etc., should be left to these delegates. Thus we would have a small body of representative men. It would be practically impossible to pack the meeting against the desire of the regular attendants. Being small, it would be easily managed, and more likely to be satisfactory. The fellows, or permanent members, would include all the present membership, all the delegates who continued to pay their dues, and, under proper restrictions, all members of local societies in good standing who were willing to pay the State Society's annual dues. In this manner the membership of the State Society should be increased to at least a thousand, and still be perfectly manageable. The advantages of such a union are at once obvious.

(2) The membership should be divided into sections. The number of these should be at least three—general medicine, general surgery and obstetrics, and gynecology. All papers could be divided between these three. Thus three papers could be read in place of one now. As the attendance at each section would be but one third, time would be afforded for more discussion of the real merits of the questions brought forth by the papers. These sections could choose their own officers and arrange for the

papers and discussions for each meeting. As the society increases in numbers, more sections could be added as seemed wise.

We have no pet scheme, but from time to time shall take occasion to present such phases of the subject as seem to us important. Besides, the matter is one of interest to other States. There are few States in which the State Society is more than a convention, in the political sense. This does not admit of the talent in the profession finding an adequate outlet. Hence the good name of the profession of these States suffers loss. Let there be a radical investigation of State organizations, to the end that they may be more helpful to the real workers in the profession, rather than to the wire-pullers, etc.

The New Harper Hospital of Detroit.

This hospital has entered upon a new phase of its career. It has just opened to the public its new building. This building is a very handsome one, and is located in the midst of a large grove of primeval oaks, right in the heart of the city of Detroit. Every room is a front one, and faces both light and air, and a beautiful prospect of lawn and trees. The hospital will accommodate over two hundred patients. In it is located the Farrand Training School for nurses. This school insures for all patients the best of nursing, an item very difficult to secure, either in public or private. The heating, lighting, and ventilation and sewerage have all been constructed under the latest approved views of special students of these subjects. A large number of private rooms are retained for the use of private patients. These are at the service of any physician who desires them for his patients. The story of the origin of the hospital is full of interest, in that it shows that from little beginnings grow large things. Some twenty-five years since there was in Detroit an aged man named Walter Harper. He had been educated in Philadelphia, and imbibed the idea that his property should be given to the poor after he had died. Hence he approached his pastor, the late Rev. Geo. Duffield, D. D., of Detroit, and told him that he would give all his property to the First Presbyterian Church, in trust, for it to use in the interests of the work of the church. Dr. Duffield took the matter under consideration. Very soon afterwards he mentioned the subject to his daughter, Mrs. Dr. Morse Stewart, of Detroit. She

at once said that the bequest should go to the establishment of a hospital for the poor, under the auspices of the First Presbyterian Church. Dr. Duffield adopted the suggestion and laid it before Mr. Harper. He assented to its wisdom and so devised his property.

About the same time a market woman, also a native of Philadelphia, who had accumulated a considerable property, and was without family, gave her property to the same corporation, on condition that the hospital building should stand upon her five acres of land, and should contain a lying-in department for poor women. To these original bequests have been added others of smaller amount from time to time. Most have come from people in very moderate circumstances, until at last the trustees have been enabled to erect the fine hospital which now ornaments Nancy Martin's five acre lot. At a late meeting the trustees appointed the following staff:

Chief of Staff—Geo. P. Andrews, M. D.

Consulting Surgeons—Theodore A. McGraw, M. D., Donald Maclean, M. D.

Surgeons—H. O. Walker, M. D., J. B. Book, M. D., H. K. Gailey, M. D., E. T. Tappay, M. D.

Consulting Physicians—Geo. P. Andrews, M. D., C. B. Gilbert, M. D.

Attending Physicians—H. A. Cleland, M. D., H. F. Lyster, M. D., Chas. Douglass, M. D., Johann Flintermann, M. D., J. E. Emerson, M. D., C. A. Devendorf, M. D., A. E. Carrier, M. D.

Gynæcologists—H. W. Longyear, M. D., J. H. Carstens, M. D., Helen F. Warner, M. D.

Consulting Ophthalmologists—J. F. Noyes, M. D., Geo. E. Frothingham, M. D.

Attending Ophthalmologist—Leartus Connor, M. D.

Laryngologists—E. L. Shurley, M. D., J. W. Robertson, M. D.

Pathologists and Curators—Frank Brown, M. D., W. R. Chittick, M. D.

Microscopist—George Duffield, M. D.

Resident Physician—H. K. Gailey, M. D.

Assistant Physician—F. W. Robbins, M. D.

We understand it to be the intention of the trustees and staff to establish an out-patient polyclinic, and in connection with the hospital service, to maintain regular clinical instruction to such students or medical men as may desire the same. It will probably require considerable time to perfect details of arrangements, but when perfected they will

add materially to opportunities for practical medical and surgical study in Detroit.

Both trustees and the staff will cordially welcome such members of the profession as may desire to see the latest sample of Hospital construction in Michigan. Those having patients which they desire to place in the hospital for treatment either by themselves or others, will also be welcomed.

Felkin's Description of a Cæsarian Operation in Africa.

Mr. R. W. Felkin, in the *Edinburgh Medical Journal*, describes a case which he personally observed. It is of interest as showing what may be done in a barbarous country, and yet both mother and child live: "The patient was a fine-looking young woman of about twenty years of age. It was her first pregnancy. Mr. Felkin was not permitted to examine her, and entered the hut just as the operation was begun. The woman lay upon an inclined bed, the head of which was placed against the side of the hut. She was in a state of semi-intoxication from banana wine. She was entirely naked. A band of bark cloth fastened her thorax to the bed, another band fastened her thighs, and a man held her ankles. The operator stood on her left side holding aloft his knife and uttering an incantation. This being done he washed his hands and the patient's abdomen, first with banana wine, and then with water. Then having uttered a shrill cry which was taken up by the small crowd outside, he proceeded to make a rapid cut in the middle line, commencing a little above the pubes and ending just below the umbilicus. The whole abdominal wall and part of the uterine wall, were severed by this incision, and the liquor amnii escaped. A few bleeding points in the abdominal wall were touched with a red-hot iron by an assistant. The operator next rapidly finished the incision in the uterine wall; his assistant held the abdominal walls apart with both hands, and as soon as the uterine wall was divided, he hooked it up also with two fingers. The child was next rapidly removed, and given to another assistant after the cord had been cut; and then the operator, dropping his knife, seized the contracting uterus with both hands and gave it a squeeze or two. He next put his right hand into the uterine cavity, through the incision, and with two or three fingers dilated the cervix from within outwards. He then cleared the uterus of clots and the placenta, which

had by this time become detached, removing it from the abdominal wound. His assistant endeavored to prevent the escape of the intestines from the abdominal wound. The red-hot iron was next employed to check some farther hæmorrhage from the abdominal wound, but it was sparingly applied. All this time the chief surgeon was keeping up firm pressure on the uterus, which he continued to do till it was firmly contracted. No sutures were put into the uterine wall. The assistant who had held the abdominal walls now slipped his hands to each extremity of the wound, and a porous grass mat was placed over the wound and secured there. The bands which fastened the woman down were cut and she was gently turned to the edge of the bed, and then over into the arms of an assistant, so that the fluid in the abdominal cavity could drain away on to the floor. She was then replaced in her former position, and the mat having been removed, the edges of the wound in the peritoneum were brought into close apposition, seven thin iron spikes, well polished, like acupuncture needles, being used for the purpose, and fastened by string made from bark cloth. A paste prepared by chewing two different roots, and spitting the pulp into a bowl, was then quickly plastered thickly over the wound, a banana leaf warmed over the fire being placed on the top of that, and finally a firm cloth bandage completed the operation. Until the pins were placed in position the patient did not cry. Her temperature never rose above one hundred and one degrees, F., and this but the second night. The child was placed to the breast two hours after the operation. One pin was removed at the dressing on the third morning. Three more were removed on the fifth day, and the rest on the sixth. At each dressing fresh pulp was applied, and a little pus which had formed was removed by a sponge formed of pulp. A firm bandage was applied after each dressing. Eleven days after operation the wound was entirely healed, and she was quite comfortable. The uterine discharge was healthy. The child had a slight wound on the right shoulder; this was dressed with pulp and healed in four days." As far as results are concerned, this operation in a savage country, leaves nothing to be desired. Mother and child both live and are sound.

In New York City it is becoming popular to advertise medical books in secular papers and on bill posting boards.

The Danger in Prescriptions. How Can it be Guarded Against.

We do not refer to the danger arising from drugs carefully ordered, put up and administered. The idiosyncrasies of patients to even medicinal doses of drugs are well known, though often forgotten. From these there is always a chance of danger when prescribing for a patient whose constitution we are not familiar with. We refer simply to possible errors on the part of either the doctor or druggist. The *New York Med. Jour.* says that recently several practitioners of New York City, in private conversation, recounted as occurring within their individual observation, cases in which great risk had been run. Thus one nearly killed his own child by ordering ten grains of pulvis ipecacuanhæ compositus, when intending pulvis jalapæ compositus. Another had ordered bichloride of hydrarg. when he desired the mild chloride of hydrarg. Thus a child got one-sixth of a grain of corrosive sublimate repeated three times before the mistake was recognized. Another had ordered a mixture of tincture of aconite, and water. The patient got teaspoonful doses of tincture of aconite, as the druggist neglected to add any water to the aconite. These samples are not at all remarkable. Few practitioners of any extended experience have failed to make similar or even worse mistakes. That the druggists do the same goes for the saying. Of the fact that doctors make mistakes in writing prescriptions there can be no doubt. But as to the remedy there is ground for difference of opinion. One suggests that each doctor put up his own prescriptions. But the same elements which would enable a man to make a mistake in writing a prescription would cause him to put up the wrong drug. In fact, as the *Journal* suggests the mere fact that the prescription has to pass through the hands of two men, renders the detection of any mistake more certain. Hence the putting up of a prescription by a druggist will add one safeguard. Personally we have found that the copying of each prescription does away with all errors. In the experience of several of our professional friends the same result has followed the same course. It takes time, which at first one hates to spend in this manner. But the fact that it requires a second careful examination of each item of the prescription, and that it furnishes an exact record of what has been done, fully compensates for all the extra trouble. If, in addition to the copying of each prescription,

it were made a rule by every doctor to read each prescription backwards, it would seem as if it would be impossible for any doctor to make a mistake. Carelessness in prescription writing is but too common. A reformation in this regard is much to be desired. It should be remembered that each prescription crystalizes all the doctor's knowledge of the case in hand, in every respect. Hence the desirability that it always be prepared with the most scrupulous exactness in each particular. However poor may be the writer's art of writing he should make every letter of his prescriptions so plain that a school boy would not be puzzled to make them out. If it requires the making of individual letters of Roman form, let this be done. The awful chirography to be found in the prescription files at the drug store, is proof that too many excellent doctors fail to write their prescriptions with the same carefulness that they would use a knife in performing an iridectomy or opening the abdominal cavity. And yet both are therapeutic agents, fraught with good or ill to the patient, as they are used with knowledge of brain, intent of heart, and skill of hand.

The dangers which come from the careless druggist form a subject worthy of the most earnest consideration. But we have not space to devote to them here and now.

Edinburgh as a Place for Teaching Medical Students.

Dr. J. Milner Fothergill, in the *Medical Times*, gives the following as among the peculiar advantages of Edinburgh as a place for teaching medicine: "The feuds existing between different professors compelled them to examine each other's teachings in the light of the most hostile criticism. Thus Simpson waged war on Syme, who retaliated. J. Hughes Bennett scoffed at both, and sneered at everybody in a general way. Henderson, the learned professor of pathology, leaned to homœopathy, which drew upon him the animadversions of his colleagues. J. Hutton Balfour, the professor of botany and dean, probably had as deep an insight into the youthful heart as ever man possessed, and the most carefully planned excuse—an excuse is a guarded lie—fell dead on his ear. Nobody ever beguiled old 'Woody Fibre,' who was one of the best hated men that ever breathed, though as time went on the feeling softened, and the whilom student began to see that 'old Woody' was not such a bad fel-

low after all. He and Bennett both had a habit of remembering a man's offenses and misdeeds at the examination table, which, if not quite fair, exercised a wholesome effect. Christison was as upright in mind as he was in figure—and a grand figure he possessed, even when the weight of years was telling on his faculties. Old Johnny Goodsir, a tall, lean rail of a man, was a grand anatomist and respected of all. Certain it is that, as a teaching machine, the medical profession of Edinburgh is unexcelled by any other in the world." This bit of the personality of the past teachers at Edinburgh is interesting as exhibiting the elements which have made the past of this famous school, which has just celebrated its third centennial. However much buildings, laboratories, museums, and other material things are needful for the best development of the best medical colleges, it should never be lost sight of that the brains of the teachers constitute the real school. They constitute the source whence all that is good in the school takes its origin. In fact, good teachers, rare enough in any school, are especially rare in medical colleges. It does not strike us that the virtues of the Edinburgh school arose in any degree from the antagonisms of its teachers. Indeed, we are inclined to the strong belief that the school would have been far better had none of these antagonisms existed. It is not possible but that had teaching occupied all these superb brains to the exclusion of personal controversies, even better results would have been reached. But, doubtless, the wild Highland blood rendered this impossible. Be this as it may, we accord all praise and honor to these worthy teachers who, in the face of such difficulties, accomplished such marvellous results.

State Medical Societies as an Advertising Medium.

The State of Pennsylvania State Medical Society has awakened to the fact that some of its members have been using the meetings of said society to advertise themselves. Hence they passed the following resolution: "Resolved, That the Medical Society of the State of Pennsylvania looks with great disfavor upon the making of its meetings an advertising medium, and holds such practice as contemptible, and a flagrant violation of the spirit of the code of ethics." The above, which we take from the *Medical News*, does not tell us who has been guilty of thus doing violence to the sense of justice of the society.

Hence each reader must ascertain for himself. Still, even at this distance some of the offenders are well known. Doubtless there are others who have operated on a smaller scale. We trust that they may take heed to the suggestion and sin no more. Still we fear that the disease lies too deep for any such easy cure. Time will tell. The resolution and accompanying text does not inform us in what manner these men disgraced themselves and the medical profession. Hence we are again compelled to conjecture the nature of the offense from our own observation of the way the advertising doctor operates. Of one thing we may be sure, if the advertising doctor reads a paper at the Medical Society, the fact will be announced in all the secular papers as many times as possible. With these announcements will be given all the offices he has held, the papers he has read, the instruments he has invented, the salves he has concocted, the good things in the way of puffs he has received, etc., etc. After the paper is read it will appear in the secular papers in full or abstract with all the accessories of its preliminary announcement. If a few friends are entertained this is put in the secular papers with the addition of the diseases in which the advertiser wishes to make a boom. Thus in one way or another, by fair means or foul, our advertiser has dragged himself before the community on the strength of his connection with a state society. The ways of this species of doctors are infinitely varied but in ingenuity they surpass even Barnum with his Jumbo and white elephant, fat woman, etc. We question whether a simple resolution will avail much to keep these harpies in check. If so, there are many other states than Pennsylvania which will be glad to copy the device.

An Epidemic of Diphtheria Caused by Infected Milk.

In Great Britain many cases of this sort of infection have been reported, but as yet little definite has been observed in this country. In an article in the report of the New York State Board of Health, our old friend, Dr. F. C. Curtis, gives a full report of an investigation of an epidemic of typhoid fever, in Port Jervis, New York. All the needful details are given, and all point to the conclusions stated by the author, as Port Jervis is a place of about eight thousand people, it was the more practicable to ferret out all the elements of the case. The following are the writer's

results: "The epidemic was one of true enteric fever. It made its appearance in a previously healthy locality. It arose suddenly and ended suddenly. It was limited to the village. It exhibited no local foci of affection. It affected several members of a large proportion of the affected families. Eighty-seven per cent of the cases occurred among persons using the milk supplied by one vendor. One half of the families using this milk were taken with this fever. The persons using this milk constituted about five per cent. of the entire population. But two-thirds of the milk supplied by this vendor was from the suspected source. The possibility of the milk becoming infected from the cases of the disease at the dairy farm is established. There was no cause affecting the subjects of the disease in common, except the use of this milk. From the data thus obtained, it is certain that the epidemic was caused and spread by the medium of infected milk."

It is to be hoped that the spreading of the facts thus established will awaken a greater interest in the origin of the supply of milk and butter, to all villages and cities. The lack of care, general and special, in all that relates to the preparation of milk and butter for the market is but too common. And yet there are few substances that have the power of absorbing so much of dirt in the air, water and soil which surrounds them, as milk and butter. The sanitarian and philanthropist has here a field for practical work, broad and deep enough to call into play all his powers.

The Ideal Professor of Pharmacy.

We are accustomed to the demonstrations of general and special ignorance by the occupants of chairs in medical colleges, but the defects of professors in schools of pharmacy are less familiar to the medical profession. Hence we were interested by an article in the weekly *Drug News*, in which the attainments or lack of attainments in two professors of pharmacy are exhibited. It says that formerly there was a respect felt for professors in pharmaceutical schools. It was expected that a professor of pharmacy would not only have a knowledge of the subject he taught, but be able to use the English language grammatically, to correct errors in the use of Latin as employed in pharmaceutical literature, to so know chemistry as to be able to detect errors in the writing of ordinary chemical

formulæ or simple equations. But in the case of the two professors referred to it is claimed that they are entirely innocent of such knowledge. Besides, they are unable to even use the English language correctly. In short, it is affirmed that these professors know neither English, Latin or chemistry. Thus it has come to pass that the chairs of colleges of pharmacy are in some instances prostituted to the use of such men as profess some special attainment without any reference to their actual qualifications for the position of teachers. Is it to be expected that graduates of such professors be regarded as fit to practice pharmacy? In view of the negative answer to this query the *Drug News* calls for a law which shall compel these graduates to pass proper state examinations ere being permitted to enter upon the practice of pharmacy. In short, it calls for in the pharmaceutical profession exactly what many medical journals call for in the medical profession. In either case it is claimed that professors ignorant and utterly incompetent to teach in a learned profession have filled the ranks of the profession with so much bad material that the public, in its own interests, should pass a law for the appointment of examiners who shall separate the wheat from the chaff, and leave only competent men in either profession.

Koch's Rewards for His Discoveries in Egypt and India.

It is given to few men to obtain and keep the attention of the rulers of a nation as has Dr. Koch. He has made brilliant discoveries, it is true, but at each he is promoted in honor and crowned with gold. This is the more marked, as usually it has not pleased governments to thus reward its scientific workers. In the Reichstag a bill was passed by acclamation, giving Koch thirty thousand dollars. Smaller sums were given to his assistants. The commission was a government one, and paid salaries, and all expenses by the government, while making these investigations. To all this is now added this very substantial reward. In addition to the money, Koch has received the crown order of the second class, and was presented with a life-sized bust of the emperor, done in marble, by a distinguished sculptor. Virchow warmly seconded the giving of these awards to Koch, although he does not express any great hope that they will prove of importance in the prevention of cholera.

That Koch has found a bacillus in connec-

tion with cholera there can be no doubt, but it is not at all certain that this bacillus is the cause of cholera, any more than it is certain that the crows about a dead horse are the cause of its death.

Still we can all rejoice in that his excellent work has at once met with right royal recognition and substantial honor of every kind. This treatment furnishes a hope to younger and obscure workers that they may also attain to great honors and rewards. But they will be unlikely to get them from the legislature and executive governmental bodies of the United States. In some coming age we doubt not that it will become fashionable to reward honest, original, scientific work. But not now or here.

Debove's Treatment of Ulcer of the Stomach.

The scientific treatment of this distressing affection is far from satisfactory. Debove, of Paris (*Bost. Med. Jour.*), in a discussion lately, made a useful suggestion bearing on this subject. The principle of the treatment is to give such food as can be digested in the small intestine, and then entirely neutralize the acid of the stomach. In short, he proposes to stop all stomach digestion in order to get rid of the irritating influence of the gastric digestive acids. In this manner he hopes to relieve the intolerable pains and the vomiting attendant upon this process in cases of gastric ulcer. His plan is briefly as follows: During the first few days he washes out the stomach to free it from acid matters which it may contain. He regards this as entirely safe, and has never seen it produce vomiting. He uses a soft flexible tube, whose extremity, if it should hit against the seat of the ulcer, could do no harm. Then he administers to the patient, three times a day, twenty-five grammes powdered meat, suspended in milk and mixed with ten grammes bicarbonate of soda. This mixture is administered at meal time by means of the stomach tube, as it is less apt to nauseate the patient than when taken in the ordinary way. Besides, the patient is given a pint of milk daily, rendered alkaline by lime water. He shows that the four cases he has had under treatment have taken daily for several months, one ounce of bicarbonate of soda. This treatment has never given rise to those symptoms which are termed the alkaline cachexia.

Whether farther experience shall confirm the author's views or not, they are of sufficient

importance to receive the attention and careful consideration of those having charge of these cases of gastric ulcer.

Memoranda.

The Massachusetts State Medical Society has 1,529 members.

One quarter of the population of London receives gratuitous medical aid.

The *Medical News* thinks that hydrocele can be cured best by the injection of from 20 to 60 grains of liquified carbolic acid into the sac.

Dr. Roemer, of Berlin, publishes a case in which he successfully operated upon a child for ovariectomy at the age of one year and eight months.

Two deaths are reported from ether administration per rectum. This is a very bad record. Intestinal irritation has occurred in many instances.

The late Dr. Warren Stone thought that one of the greatest blessings which could come to the country, was the cultivation and general use of sub-acid fruits.

A Vermont physician, of fine education and promising future, visited Boston, went on a spree, and in a bar-room fight killed a man. He is now in jail charged with murder. Wild oats.

Dr. Gordon, of Portland, Me., claims to be able to produce anæsthesia by ether, in 90 per cent. of cases in three minutes. He uses two or three thicknesses of old coarse towel well capped up over the face.

In 1860 the South Carolina State Medical Society numbered 260 members, but in 1884 it has less than 150 members. It does not appear that the society has improved in quality as it has diminished in numbers.

It is stated that Magendie was a full-blooded Irishman. He spelled his name McGendie, but living long in France, the French came to call him Magendie, and then claimed him as a Frenchman because of his French name.

The London art dealer, Mr. King, at his death left half a million dollars to St. George's hospital, and more than half a million dollars to his medical adviser, Dr. Roper. He was a model patient, fully grateful for the service rendered him.

The recent discussion of Illinois courts confirm the right of the Illinois State Board of Health to determine the status of both colleges and practitioners. Hence there is no appeal from their decisions in either case. By law they are at the top.

Dr. Keiler (Edinburgh *Medical Journal*) says that Syme bought the chair of clinical surgery from its former occupant for \$1,500 a year. Surely a change has come over the profession since, as at the present time such a transaction would not be regarded as reputable.

Dr. John Middleton, of Stockton, England, died recently from a dose of chloral. He is believed to have taken an over-dose. On the opposite page of the *British Medical Journal*, on which this fact is stated, is a notice of the death of Dr. L. P. Yandell, who died from the same cause it is said.

We have received the American Journal of Ophthalmology. It is edited by Dr. Adolf Alt, M. D., and published by J. H. Chambers & Co., St. Louis, Mo. Price \$2.50 per year. It is a 32-page monthly. All interested in this subject will gladly welcome this new addition to our ophthalmological literature.

The Toner collection of medical books in the congressional library, was increased last year by 470 volumes of books, and 3,755 pamphlets. The total collection now numbers 27,515 volumes, and 15,755 pamphlets. Recently there has been added an extensive collection of authentic portraits of American physicians and surgeons.

Women physicians are now to be admitted to the Massachusetts State Medical Society, on the same condition as men. The conflict has been long and more or less bitter, but the end has at last come. They have now a chance. That it will be of any real service to women does not appear, but as to this, experience will give answer.

Dr. E. Klein, of London, by a series of experiments, has shown that the infusion of jequirity does not owe its action to the bacilli which it contains. Alone by themselves these bacilli would not produce the effects of the drug. But the infusion of the drug deprived of its bacilli did produce the usual effects. Thus the proof seems undoubted.

The courts of Prussia have decided that a fœtus becomes a human being, legally, the moment labor has begun, when it has begun to have a separate existence by trying to sep-

arate itself from its parent. The decision was rendered in connection with the charge of manslaughter against a quack who killed by forceps, a fœtus in a case of normal labor.

The twelfth annual meeting of the American Public Health association, is announced to begin at St. Louis, Mo., October 14th, and to continue four days. Those having papers to read will please communicate with the secretary, Dr. Irving A. Watson, Concord, N. H. All persons interested in public health may become members, and are solicited to help forward the ends of the association

Dr. S. D. Gross bequeathed his medical books, diagrams, and specimens to the Jefferson Medical College, the Philadelphia Academy of Surgery, or the Philadelphia College of Physicians and Surgeons as his executor shall decide. If neither of these institutions desire the bequest they are to be given either to the University of Pennsylvania or the N. Y. Academy of Medicine.

Dr. Thos. J. Griffiths died at his home in Louisville, Ky., June 1st, aged 58. He was best known for his work in connection with the Marine Hospital at Louisville. His abilities as a physician gathered about him a large and devoted clientage, while his manly character won for him hosts of friends from every walk in life. More fortunate than most doctors, he accumulated a very handsome fortune.

On the evening of June 19th, Dr. Morse Stewart, of Detroit, gave a reception to Dr. E. W. Jenks, on the occasion of his return to Detroit to live. The medical profession of the city were generally present to pay their regards to the host and his guest. Altogether it was an enjoyable evening. Many distinguished citizens of the city, lawyers, clergymen, merchants, etc., were present joining in the pleasures of the evening.

Graduates of American medical colleges continued:

Woman's Medical College of New York Infirmary, 8.

Medical Department, Central University, 13.

Bowdoin Medical College, 33.

Long Island College Hospital, 44.

Medical Department of Michigan University, 85.

Michigan University, Homœopathic Department, 19.

Two English doctors were lately called upon to make a post mortem examination

upon a woman who had died rather suddenly and been buried for several days. While attempting to open the lid of the coffin, it burst with a loud noise, one of the boards knocking down the police inspector. One doctor fainted and remained unconscious for some time. But the shock was such that he died shortly afterwards. The other doctor was made seriously ill.

The dialysate of jequirity has been found in the New York hospitals to have all the virtues of the recent infusion. As it is free from all bacilli, its activity cannot be due to the bacilli. Several observers have found an active principle having all the properties of the infusion. This active principle is insoluble in chloroform, alcohol, benzene or ether; it is comparatively soluble in water, and very soluble in glycerine. Hypodermically injected into mice or frogs the poison quickly kills.

A correspondent of the *Medical Record* says that he has a letter from a physician at a French watering place offering to pay a certain number of pounds for each patient the English doctor would send to him. This is surely French thrift, as in this country such a course of procedure is regarded as dishonorable. It is said that the competition between the resident physicians at these watering places is such that they are compelled to resort to this and other dodges in order to get practice.

The *Medical World* of Philadelphia issues a supplement. It consists of a large chart exhibiting in tabular form the principal features of urinary analysis in disease. It was prepared by Dr. Lewis. Tests are given for albumen, sugar, bile, excess of phosphates, excess of urea and excess of uric acid. Not all the recent tests are given, but the most reliable and standard ones. The chart will prove convenient for such as desire to hang such a chart on the wall in reach of all. It is correct so far as it goes.

The Brooklyn Board of Health, by its chemist, has found coffee adulterated with the following agents: French chalk, gum arabic, charcoal from wood, drop black, yellow ochre with a mixture of clay and hydrated oxide of iron, chrome orange, celestial blue, and turmeric, venetian-red, quinia, indigo, indigo extract and persian berries with ochre. The health commissioner issued an order prohibiting the use of chrome yellow or orange or any substance containing lead, celestial blue or prussian blue.

A physician of New Zealand has been convicted on a charge of manslaughter, and sentenced to four months imprisonment. It seems that he attended a woman in confinement, who died suddenly and at the post mortem examination was found to have had her vagina ruptured. The doctor had not used any instruments, and it is not at all clear that his management had anything to do with the death of the woman. But some judges and juries seem to know more of obstetrics and the responsibility of obstetricians than even medical men.

The late Professor Wurtz died from the results of retaining his urine too long. He was travelling in a railroad car and not finding it convenient to pass water, retained it too long. On his arrival at his home he was seized with symptoms of blood poisoning and died in a few hours. No doubt the fatal termination was hastened by the fact that he had been suffering from diabetes. Doubtless more similar accidents happen to travelers in cars which do not afford convenience for voiding the urine. American cars usually possess all such common necessities of life.

Dr. R. S. Sutton successfully performed an enterotomy upon a Pittsburgh lady of wealth. He removed four inches of the small intestine, uniting the divided ends by sutures. She recovered. He charged \$1,000 for the operation and 12 days' attendance. As payment was refused, Dr. Sutton brought suit. The jury gave a verdict for \$330. The plan adopted by the jury for determining the fee was original. Each put down the amount they would allow. They then divided the aggregate sum by 12, and thus reached the verdict—so says a *Medical News* correspondent.

The Wabash Railway now retains fifty cents each month from every employe who receives fifty dollars a month, or more, and thirty-five cents from all other employes. The money thus obtained is to be expended in the maintenance of a hospital for the treatment of such as are injured in the service. While it seems to us right and proper that the company should care for its injured employes, and in fact, is bound so to do, it does seem rather tough that the employes who are not injured should pay for those who are. It is a plan to relieve the railroad of the expense of caring for its men. But this is a matter as between the employes and the companies who have adopted a similar plan.

A correspondent affirms that among the examiners of the College of Surgeons of London there are men who have little claim to the title of gentlemen. Thus one of these dragged a candidate about the room by his coat collar. Of another the following story is told: The candidate, in answer to a query, replied in the language of one of the surgeons of the hospital which he attended. The examiner denied the truth of the reply, threw himself back in his chair, elevated his heels, and used such language as cannot be reproduced in a medical journal. The candidate replied that he had quoted the words of the president of the examiners, who was present. Turning to the president, the examiner said: "Here, do you hear what this — fool says? Did you ever —?" The president replied that he had so stated, when the examiner changed the subject.

In common with others, the *Medical Record* calls for a reorganization of state medical societies. The plans on which most of them operate are practically defective and should be overhauled at once. Farther, an executive officer should be chosen that has the ability and is willing to use it in planning out the work of the persons attending, so that each shall be in his proper place to do that which he can do best in the interest of the general profession. Let officers be elected for the good of the society rather than from any idea of conferring honor upon them. If this were the standard, then we would have better officers, and the tricks of political conventions would disappear from these annual gatherings. The effects of this change upon both profession and people would be to their mutual advantage and the advancement of medical science and art.

Such is fame. Thus remarked one of Grand Rapid's most distinguished physicians as he began the following little incident. In that city for many years resided one of the most notorious mountebanks of the State. Unlike the good he did not die young. Meanwhile he obtained for a patient a maiden lady of large wealth. When the mountebank at last was gathered to his fathers, this ancient maiden sent for our distinguished medical friend. She opened the interview by stating that she had long been under the care of Dr —, but he having died she had decided to install our friend in his place. Ye Gods, shall he be mentioned in such a connection? Well, directions were given as the

case called for, but on the next visit the same comparisons were made, and at the next visit. This was all our friend could stand, hence he resigned the case into other hands. To be constantly compared to a dead mountebank, in the mind of a patient, is certainly not flattering to one who in ethical purity, mental culture, and professional skill is the peer of any professional man in the West or East. Surely the cranks are not all dead.

The *Medical Record* tells the story of a student of the Women's Medical College, of New York, who got a diploma in spite of the adverse vote of the faculty. The student was a wife of a lawyer. While a poor student she could write short hand. Two professors voted against her. The student, looking for trouble, kept a copy of her examination before the professor of Obstetrics. Copies of this were sent to Dr. L. A. Sayre, Dr. J. W. Ranney, Dr. T. Gaillard Thomas, and Dr. Bryne. All of these persons certified that the paper was correct, a good one, showing unusual intelligence. By the authority of these names a mandamus was issued, requiring the Dean to either give a diploma or stand a suit. It was found that the college had no case in law, and hence it gave the diploma. Thus the opinions of these gentlemen were made to neutralize the opinions of the professor of obstetrics. As the college in question is one of the few colleges which enforce vigorous conditions of graduation, it is rather hard for its standard to be thus interfered with. Perhaps it will hereafter employ oral as well as written examinations as a test of knowledge. This could not be used as the written one.

The New York *Medical Journal* has a table giving the number of inhabitants to each acre of park, in the prominent cities of the world. In this it appears that New York city has one thousand, three hundred and sixty-three people for each acre of park—Paris has but thirteen people for each acre. These constitute the two extremes. The average of other cities is about two hundred. Of the list given this number is very uniform. Generally speaking the cities of the old world have proportionately more park room than the cities of the new. It is indeed true that other elements enter into this problem than simple acreage. Thus Detroit Michigan, by its broad streets, on the banks of the Detroit River is practically a park throughout its entire extent. In fact it is already a sum-

mer resort for large numbers of people, because of its broad streets, its single or double rows of stately trees along both sides of each street, its homes for a single family and separated from each other by a considerable space of ground; its ever cool deep river, affording unlimited resource for comfort and pleasure at a nominal expense, all these to not an inconsiderable degree take the place of parks, and even suburban residences, etc. Under such conditions as these the comparison of its acreage of parks with the total of its inhabitants, would be fallacious as in comparison with other cities, in which most of these elements do not exist, or in a very meagre degree.

Dr. Keiller (*Edinburgh Medical Journal*), in some reminiscences of Liston, relates the following: A burly carter was brought into the amphitheatre one day, with an unreduced dislocation of the shoulder. Other surgeons had failed to reduce it, because of the resistance made by the fellow to their efforts. Finally the man, like a wild beast, was led into the ring. Liston pounced upon him and at once firmly grasped the immovably dislocated extremity, which he proceeded to pull and twist, while the patient stormed, cursed, fought, and kicked, but Liston was equal to the situation. As the madman kicked, he turned so as to receive the blow where it would do the least harm, until he was in a position to return the blows and imprecations, with confounding and at the same time successful interest. While engaged in keeping up extension required to overcome the muscular contraction in order to facilitate the reduction aimed at, Liston knowingly and cleverly seized his opportunity of staggering the muscles into comparatively flaccid abeyance. While keeping up the extension with one of his big and powerful fists, and fiercely eyeing his still cursing and kicking surgical victim, Liston loudly exclaimed, "You d—d scoundrel, what are you swearing at?" and with one momentarily released mighty right hand struck him a bang between the eyes, when immediately, through Liston's masterly maneuvering, in popped the stubborn joint of the now eye-bugged carter, who obviously failed to appreciate either the laughter or the applause of the audience.

The secretary of the Ohio State Medical Society reports the demise of twenty local societies in that state during the past year.

Editor's Book Table.

Ophthalmological Society Meeting for 1883.*

We find ten papers discussing briefly special subjects, and thirteen papers reporting cases of more or less interest. Each paper or report of cases is followed by a brief report of the discussion thereon by the several members. Frequently these latter are of more value than the paper discussed.

Dr. H. Herby gives a report of a study of the refraction of the last four classes in Amherst college at the time they entered college and at the time of their graduation. He finds that about one half of educated young men are myopic. Farther, he shows that myopia is acquired at or near the twentieth year by the same causes which produced it at an earlier period.

Dr. Murdock presents certain modifications of eye instruments, principally designed to assist the surgeon in the absence of good assistants.

Dr. Seely presented his views on the value of the yellow oxide of mercury in the treatment of external eye diseases, of solutions of the bichloride of mercury, and of eserine. With the bichloride solution, one grain to six ounces water, he has frequently aborted a violent acute catarrhal conjunctivitis. In his use of eserine he deems it important that it be employed but once a day, and of a uniform strength of four grains to the ounce. He uses this for all corneal affections. With it he has so been able to reduce intra ocular tension so as to be able to do away with paracentesis and blood letting.

Dr. Mittendorf strongly commends the use of jaborandi and pilocarpine in the treatment of detachment of the retina. The patient must be kept constantly under the influence of the drug for from twenty to thirty days. He must have an elastic pressure bandage used during the same time. Most of the time must be spent on the back. Atropia should also be employed.

Dr. Stevens recommended the employment of nitrous oxide in the office for slight and brief ophthalmic operations.

Dr. Heyl suggested in certain cases of glaucoma that the supra-orbital artery be ligatured and the fronto nasal artery. He thinks that this procedure reduces the amount of

*TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY, 1883. New York: Published by the Society, pp. 130.

work required of the intra cranial carotid, and so permits it to force the blood through the vessels of the uveal tract of the eye. He supposes that the walls of the intra cranial carotid have undergone such a change that they are able to do this. The case reported does not demonstrate the correctness of his theory, though it does show that it was improved by the operative process mentioned. The subject has sufficient importance to justify the more complete testing of the theory. Should it be established, it would clear up the nature and causation of glaucoma, a thing most earnestly longed for by all physicians.

Holt's paper upon the effects of blows upon the eye, in cases where loss of sight, in whole or in part, follows a blow without any visible injury to the structures of the eye. That such cases are perplexing is no more evident than that all cases of concussion of the nervous system, in whole or part, are perplexing. The changes occurring in the brain after such injuries have never as yet been satisfactorily made out. Nor is it clear that they ever will. Such seems to have been the case in these cases of eye injury.

Dr. Spalding reported a case of sympathetic neuro-retinitis. This is a rare affection. In this instance it originated from an injury to a fellow eye by the horn of a cow. The eye was at once destroyed. There was little attention paid to the injury for nearly three months. At that time the suffering became so great, and the loss of sight in the uninjured eye so marked, that she was brought to the doctor for examination. The neuro-retinitis in the uninjured eye was evident. To relieve the intense pain the injured eye was removed. The patient made a good recovery, regaining almost all her sight.

Altogether this report contains much of interest to those engaged in the study of eye diseases.

Kelsey on Diseases of the Rectum.*

The first edition of this work was issued last year as a portion of Wood's Library of Standard Medical Authors. It has been enlarged to its present shape, and so much of additional fact added as the author has been able to gather from his own studies or those of others. He has thus added a chapter on

rectal hernia and introduced many additional illustrations.

As a whole the work is very complete. Its style is attractive. Sufficient illustrations and clinical reports are introduced to make plain the author's teachings.

He does not believe in the existence of a superior sphincter muscle. That which passes by this name he regards as a band of circular muscular fibres of the rectum. This band varies in its size and location. Nor do Houston's valves stand in any necessary relation to these bands. The physiology of defecation does not call for the existence of these bands. For all these reasons the author does not believe in their existence.

He emphasizes the necessity of a thorough physical examination of every case. Thus he mentions an instance in which from lack of such examination he treated without good result, a patient for fistula, for fissure, for polypus, and at last succeeded when he discovered a complicating eczema. In this way it required many weeks to cure a patient who should have been cured at one operation.

Concerning the treatment of haemorrhoids by injecting carbolic acid, he says that is a procedure worthy of a place among the recognized means of cure at our command. All the objections urged against this method apply equally to all other methods of cure. The danger is not greater than by other methods when the proper strength of solution is employed.

We have not space to further indicate the author's views upon disputed points. The book is a good one, worthy the careful study of both surgeons and physicians.

Hooper's Physician's Vade Mecum.*

This work was first written over 50 years ago. It passed through many editions. After Hooper's death the publisher placed it in the hands of an editor, who was in turn replaced by a second editor. The tenth edition lies before us. A work that holds its own against all new comers for more than 50 years must have undoubted merit. As a reliable and concise work on the practice of medicine it has done the profession excellent service As

*THE PATHOLOGY AND TREATMENT OF THE RECTUM AND ANUS. By Chas. B. Kelsey, M. D., with two chromo-lithographs and nearly 100 illustrations. New York: William Wood & Co. Cloth, pp. 416. For sale by John MacFarlane, Detroit, Mich.

*HOOPER'S PHYSICIAN'S VADE MECUM; a manual of the principles and practice of physic, with an outline of general pathology, therapeutics and hygiene. Tenth edition. Revised by Dr. W. A. Guy and Dr. John Harley. Vol. I. New York: William Wood & Co. 1884. The May issue of Wood's Library of Standard Medical authors Sold only by subscription.

the last edition is fresh from the press under the editorship of Dr. Harley, it may fairly be considered as up to the times.

Very many practitioners doubtless possess one or more editions of the work. For these no presentation of the characteristics of the book are needed. For others it is proper to say: this book brings together in small compass, and in a form easy of reference, those items of information which the practitioner would wish to possess when he stands at the bedside or when he studies a case with a view to its treatment. The portion of the work before us treats of general pathology and therapeutics, and some of the general diseases. In other volumes the work will be completed.

As to style the text is singularly attractive. In this point it is superior to very many books of similar nature now in the market. Then there runs through it a vein of that sharp attention to symptoms which has fallen into the background, as the clinical thermometer and other instruments have come into general use, but which meets the common sense of the average practical medical man. Few volumes of Wood's medical library will be read with more pleasure than this one.

Verrier's Practical Manual of Obstetrics.*

This is the first American from the fourth French edition. It contains Prof. Pajot's four obstetric tables, some notes by the American editor, and one hundred and five illustrations.

In scope this work occupies a place midway between the large and exhaustive treatise on obstetrics and the little handbook. It is a very accurate resumé of the obstetric art, giving its chief laws, its prime precepts, its rules for operations, etc., etc. The active worker in this field can in a few moments ascertain exactly what is the practice of the modern French obstetrician. It will also be useful for the medical student who has fully mastered the larger works and desires to refresh his memory for examination. Hence

this manual has a definite place, and in this place it will do excellent service to all who trust it. After a careful examination, we commend it to such as desire help in the manner indicated. We are glad it is to have the wide circulation of Wood's library, as it will thus be sure to perform a valuable service to a large number of physicians practically engaged in obstetric work. The hints are all the more valuable that they come from another school than the English.

Sixth Annual Report of the Rhode Island State Board of Health.*

This report covers many subjects of interest to the student of public health. It not only includes health subjects proper but also vital statistics. It even gives the results of a study of vital statistics from 1852 to 1882 in Rhode island. It gives in order a nomenclature of diseases, laws in relation to registration, reports of prevalent diseases, reports of meteorology, reports of medical correspondents, reports from town clerks, reports from the cattle commission, inspection of summer hotels, and an account of associated sanitary effort. As the summer resort business constitutes a substantial portion of the resources of the state, the board has caused their inspection with a view of rendering it certain that the hotels and their surroundings are such as would add still further to their reputation for health. Suggestions are freely made for the improvement of such places as are in any wise defective.

Soundberg's Health Hints for Travelers.*

The author tells us that he has traveled in all countries, and from his experience suggests the directions contained in the book before us. While these are brief they are certainly based upon common sense and correct physiology. Travelers without experience will do well to read carefully this book ere starting out upon their work.

*PRACTICAL MANUAL OF OBSTETRICS. By Dr. E. Verrier. Fourth edition. Enlarged and revised. First American edition, with revision and annotations, by Edward L. Partridge, M. D. New York: William Wood & Co. 1884. Cloth, pp. 395. Sold only by subscription to Wood's Medical Library.

*SIXTH ANNUAL REPORT OF THE STATE BOARD OF Health of the state of Rhode Island for the year 1873, including the report upon births, marriages and deaths in 1882. Providence, R. I. 1884. Paper, pp. 347.

†HEALTH HINTS FOR TRAVELERS. By John Soundberg, M. D. D. G. Brinton, Philadelphia, 1884. Cloth, pp. 61.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Practical Medicine.

DIABETES MELLITUS: THEORIES CONCERNING.—Dr. F. Eklund (*New York Medical Journal*, July '83,) gives the following appendix, containing the chief theories of the nature of diabetes mellitus:

1. The essential cause of diabetes is, according to Funke, the exceeding accumulation of grape-sugar in the blood; this accumulation, itself, again may arise in different manners. 1. It may be produced directly by injections of solutions of sugar into the blood; 2. It arises spontaneously in men during, for the present, unknown pathological conditions; 3. It appears as a consequence of some lesions of the nervous system; and 4. As the effect of the influence of some poisons on the nervous system; lesion of the medulla oblongata at a definite spot in the floor of the fourth ventricle (at the apex of the calamus scriptorius), section of the spinal marrow at different heights, poisoning with curare, at the same time sustaining the circulation by means of artificial respiration, yet only with incomplete inflation of the lungs; all these effect diabetes (justly and properly called a transitory mellituria). It is proved that in all these cases the sugar which is accumulated in the blood is liver-sugar. But from this it follows that the forms of diabetes mentioned depend either (1) on an increased metamorphosis of the already present liver-glycogen into sugar, or (2) on the lowering of the processes which normally annihilate sugar, either in the blood or in the textures, so that their extinction must, of course, produce an accumulation of said matter in the fluids of the body.

2. According to Claude Bernard, the cause of diabetes is an increase sometimes of the whole function of the liver, sometimes only of the change of the glycogen present into sugar, in consequence of an active congestion of the liver, depending upon paralysis of its vaso-motor nerves.

3. Schiff argues that a hyperæmia produced by paralysis of vaso-motor nerves in any considerable vascular area causes the formation of a ferment which is not to be found in the normal blood, but which within the liver changes the glycogen into sugar.

4. Pettenkofer and Veit declare the cause of diabetes to be, that with a normal synthesis of glycogen in the liver, the decomposition of

sugar produced is retarded or suppressed by impeded oxidation in the blood, but neither is the fundamental fact, the decomposition of the sugar, to be admitted, nor is the truth of the different hypotheses which are suggested to explain the causes of the pretended checking of the oxidation demonstrated.

5. Tscherinow, who regards the liver as a sugar-destroying organ whose physiological object is the metamorphosis of sugar into glycogen, maintains the view that in diabetes the energy of the liver in the processes of oxidation (more properly, dehydration) is impaired.

6. According to Pavy, the cause of diabetes in men is a paralytic dilatation of the vessels of the liver.

7. Trumet de Fontarce thinks that the genuine diabetes is of paralytic origin, depending on dilatation and hyperæmia of the vessels of the liver in consequence of their privation of the contractile stimulation of the vaso-motor nerves. It is only a transitory glycosuria, but never a real constitutional diabetes, that has been produced in an experimental way.

8. Senator suggests that diabetes may arise: 1. From an abnormally augmented quantity of sugar in the chyle or in the blood of the vena porta, or in these two together. This excess of sugar depends on an impeded metamorphosis into lactic acid of the sugar in the intestines, or on an accelerated resorption of the sugar. 2. The cause of diabetes is an abnormal acceleration of the circulation in the vena porta, whence generally more of the sugar ingested or derived from starch enters the liver. From this organ it is transported into the circulation, without having been metamorphosed into glycogen, but, moreover, the glycogen formed from sugar or other matters is transformed again more speedily and in more considerable quantities into sugar than is carried away. 3. The cause is the diminution of the power to decompose the sugar which is introduced into the general circulation.

9. Zimmen directs attention to the fact that hitherto, in interpreting the origin of diabetes, the muscles, where glycogen and sugar are formed, have not been taken into account, and, nevertheless, a muscle in repose, as we know, like the liver, stores hydrates of carbon in the form of glycogen in its tissue; during labor this glycogen is converted into sugar, that is further decomposed into sarcolactic acid, and finally into carbonic acid and water. That the muscle during its activity

destroys even the sugar circulating in the blood, is most evident from the cures that are effected of many diabetics by means of bodily exercise methodically used.

10. Cantani says that diabetes mellitus is a disease of the nutrition in which, without an abnormal production of sugar, this is not consumed as fuel in the organism. This resistance that the sugar in diabetes shows against the process of oxidation may proceed from the fact that the ferment that disintegrates the sugar is totally absent or operates in an abnormal manner on the sugar and metamorphoses it into a combination on which the oxidizing forces of the organism are wholly inoperative. According to Cantani, the blood-sugar, the paralygucose, of diabetes is different from the normal blood-sugar. As the material seat of diabetes, Cantani admits in the first stage the pancreas, even the digestive glandules of the stomach and intestines; it is only indirectly that affections of the central nervous system, by influencing the chylipoietic organs, effect diabetes.

TUBERCLE BACILLUS AND PHTHISIS.—Dr. T. Henry Green, *Brit. Med. Jour.*, in concluding a lecture on the relation of this micro-organism to phthisis, observes, with regard to treatment: "What is the practical teaching of Koch's discovery with reference to the prevention and cure of phthisis? If our pathological conclusions be even only partially true, they clearly indicate, I think, the necessity of carefully distinguishing between the bacillus and the conditions which favor its influence, and of directing our treatment to both. We must endeavor to prevent the access of the organism, and if possible, to destroy it after it has effected an entrance; and we must also strive to maintain a healthy condition of the pulmonary tissues, and thus prevent the occurrence of that tendency to apical stagnation which appears to be such an important, if not essential, factor in the disease. The latter of these indications is, I believe, as important as the former; and it is, perhaps, rather in danger of being lost sight of in the very natural eagerness with which attention is now being directed towards the bacillus.

"Firstly, then, with regard to the condition of the lung which favors the influence of the bacillus. Here it is only necessary to remark that, whatever promotes a vigorous state of health will, by improving the condition of the blood, the nutrition of the vessels, and activity of the circulation, and the exer-

cise of the respiratory function, tend to prevent that stagnation and transudation in the highest portions of the lungs, the etiological importance of which we have so especially insisted upon. The value of treatment which has for its object the fulfilment of these indications in the prevention of phthisis it is, I believe, difficult to over-estimate; and its usefulness is almost equally valuable when the disease is established. I cannot but think that, in the meantime, such treatment promises better results than any attempts to attack the specific organisms. Secondly: the tubercle bacillus. The consideration of this naturally divides itself under two heads: (a) the prevention of its access, and (b) attempts to destroy it when the disease is developed. (a) The prevention of the access of the bacillus. The present position of our knowledge appears to point to the desirability of adopting measures for the disinfection and destruction of the sputa of patients suffering from phthisis; and perhaps, also, of the alvine secretions, when there is any evidence of tuberculous disease of the bowel. It also raises the question as to how far it is desirable to allow individuals who are not consumptive, but who inherit a phthisical tendency, and especially when such individuals are out of health, to intimately associate with those who are suffering from the disease. If our pathology continues to move on the same lines, this subject may become one requiring the consideration of those who manage our hospitals. (b) The destruction of the bacillus after the disease is established. Attempts to do this are made principally by means of antiseptic inhalations. This is the fashionable, though perhaps somewhat misdirected, therapeutics of the day. A respirator charged with some antiseptic, such as creasote or carbolic acid, is now being largely used in the treatment of phthisis. Although I should be very sorry to unfairly criticise such treatment, I cannot but think that the evidence that its usefulness is in any way dependent upon its destruction of the bacilli, or of any infective substance which they may originate, is wanting. It seems to me much more probable that such inhalations, when beneficial, are so mainly through the favorable influence which they exercise upon the mucous membrane and secretion; and when, as is so often the case, they are combined with chloroform, they will also act as direct sedatives. What we want are cases of early and progressive phthisis in which antiseptic treatment alone, without adjuncts, is followed by marked im-

provement. When it can be shown, *e. g.*, that the pyrexia of early phthisis is reduced by such treatment, we shall have evidence pointing to the influence of the germicides upon bacillus of considerable value. We are now making some observations in this direction, but at present, with negative results. Whilst, therefore, I do not wish to be understood to discourage the treatment of phthisis by antiseptic inhalation, I think we must be careful as to the interpretation we put on our results. The treatment of phthisis and of other pulmonary diseases by means of medicated atmosphere has been greatly stimulated by Koch's discovery. Such treatment has undoubtedly been too much neglected in the past, and its prosecution promises the best results. But, in the meantime, I think we have no evidence that we are able by such means to influence the tubercle bacillus; although, if Koch's investigations be true, the discovery of some agent which, by destroying it, will arrest its injurious influence, is obviously the greatest desideratum."

ON THE PATHOLOGY OF DIABETES: ESPECIALLY DEALING WITH DIABETIC COMA.—Dr. Stephen Mackenzie (*British Medical Journal*) gives a total of thirty-seven fatal cases of diabetes in the London Hospital from the beginning of 1874, to Midsummer 1882. "From this series of cases, twenty-one of which have been under Dr. Mackenzie's own care, it appears that coma and phthisis are the two most common modes of termination of diabetes. Coma is a much more common ending of diabetes than is often supposed by those who see but few cases of the disease. In this series, coma of a peculiar kind was the termination of diabetes in nineteen out of thirty-seven cases, or in just over half the number. Of these nineteen cases of coma, in seven *post mortem* examination showed no gross visceral disease to which the coma could be attributed; in four cases without *post mortem* examinations, there was no *ante mortem* evidence of visceral disease in three, and in one there were well-marked signs of pneumonic phthisis during life. Further, there were eight deaths from coma, with old or recent pulmonary disease found at the necropsy; in some of these the affection of the lung was insignificant, in others advanced. The coma that closed the scene in the cases of diabetes, implicated (or followed) by pulmonary disease, had certain special characters, to be presently described, showing its connection with the diabetes rather than with phthisis.

It was not the mere loss of consciousness that terminates so many exhausting diseases. Suddenly developing coma is an unusual ending of ordinary phthisis. Besides these nineteen cases, in three others death was by coma, but an obvious explanation was presented on *post mortem* examination—viz., cerebral hæmorrhage, meningitis, suppurative nephritis. *Onset*.—Pain in the epigastrium or hypochondria, often very severe, sometimes ushers in the attack, and may precede for several days the coma. Delirium, usually of a light garrulous kind, is observed in some cases. Rapidity of pulse is occasionally the first indication of impending coma. Vomiting and diarrhœa, separately or together, was noticed in some cases for a day or so before the attack. Severe headache precedes the coma in others. Fatigue, as pointed out by Prout, and noticed by nearly all who have written on the subject, often determines coma, and the latter is thus frequently induced by a journey. *Special Features of the Coma*.—One of the most striking symptoms in most, though its degree varies in different cases, is a peculiar laborious breathing—an "air-hunger," extraordinary efforts to fill the chest being made. The patient lies gasping for breath, like a person after violent exercise, whilst no condition in the respiratory organs accounts for its occurrence. Sometimes this dyspnœa precedes the coma, sometimes the dyspnœa and coma appear together. The coma in most cases commences gradually. The patient can at first be roused, but it steadily progresses until it is profound. It occasionally commences more abruptly, and in a few cases passes off, usually to return. The surface of the body is generally cold, and the skin and mucous membrane livid; the pulse is rapid and small, and ultimately becomes uncountable. The external and internal temperature sinks exceedingly low and Dr. Mackenzie has known the temperature in the rectum to be little over 90° Fahr. This combination of coldness, lividity, and rapid pulse has led me for some time to call the condition "coma-collapse." Incontinence of the urine is noticed in some patients. The breath has been noticed by some good observers to have a peculiar odor, like sour beer, vinegar, acetic ether, acetone, etc.; but in no case that Dr. Mackenzie has observed has this been detected, though he has been on the outlook for it since 1874, and has directed the attention of those watching the patient to the point. Dr. Frederick Taylor's experience is similar. It has been said that a high temperature is necessary for its occurrence, owing to the low

volatility of acetone. The urine is also said to give off a similar odor, but the author has not noticed it even when evaporated. In some cases, the addition of a solution of perchloride of iron to the urine produces a deep brown color. This, which is a test for acetone, Dr. Mackenzie has noticed in some cases."

INHERITANCE OF CANCER.—In the course of a paper on the Local Origin of Malignant Growths, (*British Medical Journal*), Mr. Jonathan Hutchinson observed: "It is needful to say a few words as to the inheritance of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice, may, perhaps, be usefully classed as three, senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts, as regards chimney-sweeps' cancer, give perhaps the best illustration of what I mean. Before this malady was practically suppressed by act of Parliament, it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with much greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instance by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what it is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can

be given will be to say that it is a peculiarity in cell-structure generally; not germs, not a blood-malady, but a special type of cell organization, permitting with greater ease than in other persons, the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for a moment doubt that, in some instances, the inherited proclivity may be so strong, that it does not wait for the help of any exciting cause, but manifests its power in the production of a cancer which may be considered spontaneous. It is probably in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue proclivity may be transmitted, possibly even germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance, I wholly deny that we can allow it rank as a true cause of cancer."

CEREBRAL DYSPEPSIA.—By John S. Main, M. D., (*British Medical Journal*.) The author strongly insists on the purely cerebral origin of many forms of dyspepsia, where the patient is neither overindulgent, nor intemperate, nor addicted to hurrying over meals, nor accustomed to eat coarse or unwholesome food. The cerebral form of dyspepsia is well seen in many cases where a healthy man with a good appetite suddenly receives bad news when sitting down to a meal. "But, perhaps, of all conditions acting on the brain in this manner, and through the brain on the stomach, no one is more injurious, or more jarring to the cerebral elements, than uncertainty, and the worry caused by the same, more particularly in preternaturally irritable subjects. In fact, it is in connection with this same worry that the form of dyspepsia I have at present under consideration most frequently occurs. The mind, in such cases, preys upon itself; the cerebral elements seem to get jarred and out of gear; and with this condition the stomach sympathises. But in addition to worry the habitual practice of calling into action the 'reserve

fund' of the cerebrum, as already mentioned, will bring about the same consequences—namely, cerebral fatigue and exhaustion, indicated chiefly by prerenatural irritability; this condition, sooner or later, telling upon the digestive organs. Having said this, it is almost unnecessary to add, that such cases are most commonly met with amongst those who are engaged in the hottest part of the 'battle of life,' or 'struggle for existence'; and, again, amongst these, chiefly those whose business or profession leads to much anxiety, uncertainty, or over-stretching of the mental powers. In over-aspiring, over-ambitious natures 'hope deferred' may bring about the same results; as, according to the biblical expression 'it maketh the heart sick.' My attention was drawn to several cases of dyspepsia, connected with one or other of these conditions, some time ago; and what made me more strong in my view of these cases being cerebral, and not stomachic at all in their origin, was their obstinacy under all forms of natural treatment. Latterly, I have found that the only treatment capable of doing these cases any permanent good, is a change, in the wide sense of the term—a relaxation from business or study; and as regards medicines, not such as are meant to act on the stomach directly, but those meant to act on the cerebrum. Amongst these, I have found the most useful to be the bromide of ammonium, or bromide of potassium—preferably the former—given in a sufficient dose at bedtime to secure a good night's sleep, this being often very indifferent, and so tending to complicate the case; and, combined with this, to be taken three or four times during the day, such medicines as are known to have a building-up effect on the nervous system. Amongst these, the most useful being phosphorus, or the hypophosphites, and cod-liver oil. Arsenic and quinine are often also useful, and a generous diet is always indicated. Unless the stomach has passed into a state of disease (which it may do, if overtasked when in this weakened state), any of these medicines are generally well borne. It will be well to bear in mind, however, that if the mucous membrane of the stomach be in a state of irritation, quinine, arsenic, phosphorus, the hypophosphites, and sometimes even cod-liver oil, are generally inadmissible.

CORRADI ON THE CONTAGION OF PHTHISIS.—At the International Congress of Hygiene of Geneva (*Il. Pisani Disp.*, 4, 5, 6;

Lond. Med. Record.), Professor Corradi proposed the following conclusions:

1. The belief in the contagion of phthisis dates from the most remote antiquity, and held its ground, not only in the opinion of the vulgar, but as a scientific doctrine.

2. In the second half of the last century this belief reached its apogee, probably because the disease assumed a frequency unknown in the past. In most places the State was obliged to intervene and take measures, in the interest of the public health, with the scope of impeding the diffusion of the contagion.

3. In the first half of our century, on the contrary, the doctrine of contagion lost ground; anatomy and pathology being in the ascendant, etiology suffered.

4. In the last few years only has experimental pathology again taken up the question, endeavoring to give to the doctrine of contagion the support of experiments on the inoculations of tubercle. Further it is believed possible to demonstrate that the poison is represented by a bacillus.

5. The problem so clearly put by experiment must be solved by clinical observation. To pathology it belongs to reconcile this doctrine with the fact of predisposition and heredity.

6. But if contagion and transmission be possible, the conditions yet remain to be determined.

7. Meanwhile, hygiene must comfort itself in regard to phthisis as it would with a suspected malady, that is, one capable of being communicated or transmitted under certain circumstances.

8. Especially must it consider the conditions of cohabitation. If cohabitation be less constant and intimate, there will be less risk run, and the exhalations of the sick, which, apart from any specific action, undermine the health and predispose to phthisis, will be avoided.

9. Although it is not certain that tuberculosis can be communicated in articles of food, it is nevertheless prudent to avoid the flesh and milk of phthisical animals.

10. It is necessary to exercise great care in the choice of vaccine lymph, whether from the calf or humanized.

11. The institution of special hospitals, or at least of special wards, is strongly to be recommended.

12. The results of new studies and researches, undertaken with the scope of deter-

mining the conditions and means of transmission of tuberculosis, will indicate the more especial prophylactic measures it will be necessary to take.

13. Whatever opinion is professed as to the nature of phthisis pulmonalis, no one doubts the great advantage the resistance of the organism has in the struggle; and therefore one of the greatest obstacles to the diffusion of this scourge of civilization is to be expected from the practice of hygiene, which assures the moral and physical well-being of the population.

RENAL INADEQUACY.—In an address on this subject, Dr. Andrew Clark (*British Medical Journal*) said: "There is a certain state of the kidney in which, without any alteration of the structure that the eye can detect, it can, nevertheless, not produce a perfectly healthy urine. It is an urine low in density and deficient in solid constituent, principally in urea and its congeners. I call this state renal inadequacy. You may say, 'It seems scarcely wise to introduce a name like that, when probably it is nothing less than an early stage of Bright's disease. Why bring in another name?' I will not say that it is not an early stage of Bright's disease; I do not know. I think it need not necessarily be; but I shall assume that it is, perhaps, a very early stage of Bright's disease. I nevertheless think it of practical value—and we who are here to-night are practical men—to recognize by a distinct name a state which may remain as it is during the whole period of life, which is nevertheless capable of removal, and which, if unnoticed, may lead to serious injury to the patient. Let me explain. The people who have this renal inadequacy are characterised by three things particularly. First and foremost, they are characterised by a curious inability properly to repair damages done to them either by accident or disease. I have no doubt you as well as I have been puzzled to know why, in particular cases, they could not repair a common accident; or why, in a disease such as pneumonia, the exuded stuff was not melted and speedily swept away; why a man who had met with some trifling accident in the wrist or shoulder remained suffering from it. Then, they not only repair damages of this kind slowly, but they are peculiarly vulnerable. They are a people, as a rule, who are always catching cold, and who, when they catch cold, come within the category of the first characteristic—namely, that they do not get rid of the cold. They are the people who

without apparent reason, and without other existing disease, get pneumonias, pleurisies, pericarditis, and the like. Then, thirdly—and, I think, almost the most important thing to be noticed about these cases—you can never be sure of the result of the performance of an ordinary surgical operation upon them. It is this class of people, as I had the opportunity a few years ago, in London, of discovering, that die from a simple operation by hæmorrhage. It is this class of people who have an abscess opened and immediately become what is called pyæmic. It is this class of people who, without his being able to explain it, attracted the notice of that distinguished surgeon Sir James Paget. Some years ago he said, 'Whenever I find a man in ill-health, without definite cause for the ill-health, I feel sure that my chances of success in operating upon him are diminished by at least one-half.'"

HYPERPYREXIA—ITS CAUSES, CONSEQUENCES AND TREATMENT.—A committee of the London Clinical Society, after a full study of hyperpyrexia, give (*Med. Press and Circular*) the following report:

1. Cases of acute hyperpyrexia in rheumatism, appear to prevail at certain periods, having in the last decade been remarkably numerous in the years 1873-76, whereas, latterly they appear to have been much less frequent. Such excess corresponds in a certain degree, but not in actual proportion, to a similar excessive prevalence in acute rheumatism generally. The largest number of cases of hyperpyrexia arise in the spring and summer months, whereas rheumatism is relatively more common in the autumn and winter.
2. Whilst very little difference obtains between the two sexes in regard to proclivity to rheumatism, the proportion of males to females exhibiting hyperpyrexial manifestations, is 18 to 1. But as to age, no such marked difference exists; nor as to occupation.
3. The subjects of hyperpyrexia show no undue rheumatic tendency, as regards family predisposition.
4. The cases of hyperpyrexia preponderate in first attacks of rheumatic fever.
5. Hyperpyrexia is not necessarily accompanied by any visceral complications, but may itself be fatal. The complications with which it is most frequently associated are pericarditis and pneumonia.
6. The mortality of these cases is very

considerable, hyperpyrexia being one of the chief causes of death in acute rheumatism.

7. Although present in a certain number of cases, and these of much value from their prodromal significance, neither the abrupt disappearance of articular affection, nor the similarly abrupt cessation of sweating, is an invariable antecedent of the hyperpyrexial outburst.

8. The supervention of delirium or other symptoms of nervous disturbance is very frequently either antecedent to or simultaneous with the hyperpyrexia.

9. There is considerable variability in the date of the occurrence and in the duration of the hyperpyrexial condition, ranging, according to our observations at least, from the fourth to the thirtieth day.

10. When death results, it has occurred mostly in the second and third weeks of the rheumatic attack.

11. The post-mortem examinations, in a certain proportion, elicited no distinct visceral lesions; and when present, the lesions were not necessarily extensive.

12. The prompt and early application of cold to the surface, is a most valuable mode of treatment of hyperpyrexia. The chances of its efficacy are greater, the earlier it is had recourse to. The temperature cannot safely be allowed to rise above 105° . Failing the most certain measure—viz., the cold bath—cold may be applied in various other ways: by the application of ice, by cold effusions, ice-bags, wet sheets, and iced injections.

THE ETIOLOGY OF TYPHOID FEVER.—Dr. J. R. Ryley (*Australian Medical Journal*) gives as reasons for regarding the poisons of typhoid and malarial fevers nearly related, the following:

1. The absence of any contagion or specific poison, or poison produced by feculent or other animal matters, the country being occupied by Europeans for the first time.

2. The presence of the malarial poisons, as evidenced by the presence of diseases universally acknowledged to be of malarial origin.

3. The remarkable proclivity to this disease exhibited by recent arrivals.

4. The occurrence of the fever all over the district, and not from any centre or centres of infection, and especially after hot weather followed by rain.

5. The occurrence of the fever where the soil was exposed to solar and atmospheric influence, by the cutting down of the jungle

as well as the upturning of the virgin soil, composed almost entirely of decaying vegetable matter.

6. The appearance of this fever on nearly every new gold-field, such as Forbes, Grenfell, Gulgong, etc. when virgin soil was turned up, and, as in Westland, not so much among the inhabitants of the towns as amongst the mining population, working in and camping on the claims. This fact was observed also during the late Zulu and Afghan campaigns, as well as during the American civil war.

7. The disappearance of the disease under the influence of acclimatisation and settlement, rather than from improved sanitary conditions.

8. The well-known fact that some malarial soils, innocuous during hot and dry weather, become dangerous after a shower of rain. Any old Australian gold digger will tell you that he can "smell fever poison" under such circumstances.

9. Last, not least, the enlargement and softening of the spleen observed after death in every case of death from typhoid that occurred in Westland.

He also says: "In the whole of my large experience I never saw an instance of this fever spreading by contagion, and I much doubt whether there can be produced a single well authenticated case of such a mode of propagation in these colonies."

PATHOLOGY AND RADICAL CURE OF HAY FEVER.—Dr. John O. Roe, (*N. Y. Med Journal*), from a study of the subject, deduces the following:

1. That hay fever is an affection not confined to any age, sex or condition in life.

2. That it is excited by the pollen of flowers or grasses, dust or other irritating substances floating in the atmosphere, which are brought, by inhalation, in contact with the nasal and bronchial mucous membrane.

3. That the nasal mucous membrane in certain individuals is very susceptible to the irritating effect of these substances, while in others it is not.

4. That this hyperæsthesia is associated with or occasioned by a diseased condition, either latent or active, of the naso-pharyngeal mucous membrane, and with an hypertrophied condition of the vascular tissue covering the turbinated bones and the lower portion of the septum.

5. That the systemic disturbances, such as asthma, etc., are the effect of irritation of this

diseased tissue in the nasal passages, which is reflected to the larynx, bronchi and lungs, causing in them a fluctuatory hyperæmia, produced through the correlating function of the sympathetic ganglia connecting these different regions.

6. That the treatment during the attack can only be palliative, such as to sooth the inflamed parts and to quiet the systemic disturbance which may be occasioned.

7. That in most cases the only effective relief, during attack, consists in going to a seaport or mountainous region, or to any locality where the air is free from the substance which produces the irritation.

8. That curative measures can only be adopted when the individual is free from the attack.

9. That the removal of the diseased tissue in the nasal passages removes the susceptibility of the individual to future attacks of hay fever.

CLINICAL STUDIES OF ALBUMINURIA.—Dr. A. V. Meigs (*Cincin. Lancet and Clinic*) makes the following points from a study of sixty-two cases:

1st. That in no ordinary, uncomplicated case of Bright's disease should a prognosis of speedy death, or even of incurable disease, be given, for I have related cases in which the disease was chronic, lasting more than two years, and which ended in complete recovery, and others in which the person affected has lived nine years.

2d. That dyspnœa, usually taking the form of renal asthma, is much more common than is usually supposed, and, when properly appreciated, is a valuable diagnostic sign of the disease; also that severe coryza is a complication or accompaniment, and has a diagnostic value.

3d. That Bright's disease, as a cause of death, is on the increase.

4th. That it is a very common cause of the deaths of old people, probably being the direct cause in many deaths reported as of old age.

5th. That the passage of gravel, even when microscopic in size, but particularly if large enough to cause nephritic colic, is a prolific cause of the disease.

6th. That the occurrence of tube-casts in the urine, without, or in advance of, the presence of albumen, is very common, and *vice versa*, persons may die of Bright's disease, and the most careful examination fail to show

any tube-casts, although there may be albumen constantly present in the urine.

7th. That the abuse of alcohol is certainly a cause of kidney disease, as proved by the case I have related, in which it has, again and again, caused hemorrhage from the kidney, with the temporary presence of albumen and tube-casts in the urine, disappearing again with the cessation of the consumption.

THE CLIMATIC TREATMENT OF PULMONARY CONSUMPTION.—Dr. J. H. Tyndale (*N. Y. Med. Jour.*), in a very able and interesting article on the above subject, in which he has gathered the opinions of a large number of observant medical men throughout the country, advances the following argument in regard to sea- and mountain-air:

1. That the vast majority of consumptives are tubercular with accompanying inflammation, and not *vice versa*.

2. That tubercular consumption is a product of the tropics; of the combination of heat and moisture, which encourage venous stagnation (hyperæmia) and embolism of heart capillaries.

3. That, therefore, the two enemies to be avoided are persistent heat and excessive moisture.

4. That this avoidance requires distance from tropical latitude on the one hand, to avoid heat, and distance from the father of moisture, the ocean, on the other.

5. This distance takes us inland, either into the middle of our continent, or up into the frigid zone. The greater the distance the better.

6. The frigid zone combines excess in cold with fluctuation of temperature and some moisture—the progenitors of acute inflammation of the air-passages.

7. That if the *horizontal* distance be not great enough to keep out of additional danger, we must look for the extension of distance in the *vertical* direction—at mountain heights—at *far inland high altitudes*.

NOCTURNAL ENEURESIS TREATED BY VOLTIC ALTERNATIVES.—Dr. Althaus writes, (*Brit. Med. Jour.*): "In June 1882, I was consulted in the case of a boy, aged 15, who had suffered from incontinence of urine during sleep, ever since he was nine years of age. He had been treated with belladonna and other medicines without relief; and as he was about to enter a public school, where a continuance of this trouble might have been particularly annoying, the parents were very

anxious that something more should be done. The boy's general health was good, but he was considered a nervous child, and highly sensitive. There were no ascarides, but he had a very long prepuce which could only with difficulty be retracted. There was however, no suspicion of masturbation. Treatment by electricity having been recommended, I applied the middle-sized circular cathode over the region of the bladder, and the large oblong anode (five inches by two) to the lumbar portion of the spine, the current-strength 2.50 milli-amperes for five minutes at a time. As after a few such applications no material benefit appeared to have been gained, I then added fifty voltaic alternatives produced in the metallic circuit. The night after this was free from the usual annoyance, and the boy has made an apparently uninterrupted recovery." Dr. Althaus prefers this method of treatment to injections of nitrate of silver, as recommended by Sir Henry Thompson. He believes that belladonna is of value when enuresis is distinctly caused by undue excitability of the bladder.

TREATMENT OF DYSENTERY.—Mr. F. Rawle, M.R.C.S., (*British Medical Journal*), observes that, at the present time, when dysentery is very prevalent, especially amongst those who have returned from the Egyptian war, any suggestion that may mitigate the suffering of so fatal a malady will be hailed with gratitude. The plan he has used with most success is the following: First, having placed the patient between warm blankets, a pint and a half of warm water, at a temperature of 90° Fahr. is injected. This is seldom retained longer than a few minutes, but is pronounced very grateful to the patient. When the water has soothed the mucous membrane of the colon and rectum, and brought away any *effete* matter, two ounces, by measure, of the following enema is administered with a gum-elastic bottle: R Quinine sulphate. ten grains; compound tincture of camphor, four drachms; decoctum amyli, to two ounces. Mix, and when about milk-warm, inject, which is generally retained; but, if ejected, it may be repeated after an hour or two. This has been found of great service, and very grateful to the patient; the effect is like magic. If griping pains be felt over the region of the epigastrium, half-drachm doses of chlorodyne, in some aromatic water, mint, caraway, or aniseed should be given. The diet, of course, should be of

the most soothing kind: jellies, isinglass, linseed, toast and barley water *ad libitum*. Ipecacuanha appears of little service, and Mr. Rawle has discarded it from his treatment. Warm turpentine stupes on warm flannels, over the hypogastrium prove very beneficial.

INDIAN ENTERIC FEVER.—Dr. R. H. Quill, (*British Medical Journal*) gives the result of an examination of the annual returns of the sick and wounded troops of Assirgarh, Central India, from 1875 to 1881. The station is completely isolated, and the conservancy carried out by the "dry earth system," the contents of the latrines are emptied into a ravine two hundred yards from the station, twice daily. The drinking water is carefully filtered. Every precaution is taken to avoid exposure to fæcal impurity. During the period just mentioned, not one single case of enteric fever occurred among the troops. The believers in the climatic origin of cases of enteric fever in India very correctly point out, that the principal victims of this fever are young soldiers, with little Indian service; and that the older men, with an Indian service of four or more years, are rarely sufferers from it. Without gainsaying this observation, or attempting to account for it, Dr. Quill would simply say that, for a space of five years, Assirgarh has been occupied by successive batches of young and unseasoned soldiers without the occurrence among them of any type of fever other than the mildest form of ague. The climate of Assirgarh is no better than that of many other stations in the Bombay presidency, where enteric fever is of only too frequent occurrence; but its isolated situation, and the nature of its surroundings, lessen to a very great extent its liability to fæcal contamination of any sort; and herein lies the reason for the immunity it enjoys from the presence of enteric fever.

AN INQUIRY INTO THE CAUSES OF THE INCREASE OF CANCER.—By Hugh P. Dunn, F. R. C. S. At the end of a long and elaborate thesis on this question, Mr. Dunn concludes, (*British Medical Journal*), "1.—That, in the face of incontrovertible facts, cancer is increasing in England. 2.—That this increase is due (a) To the success attending the legislative measures and other means for the preservation of the infant population, by which a large proportion of persons reach adult age, and the general healthiness of the community is increased. (b) To the greater prominence which, in the present day, pre-

vails, of the most predisposing causes of the disease—such as the fecundity of women, the prevalence of high nervous tension, the existence of possibly greater general luxury in the mode of living. 3.—That the immunity apparently demonstrated by the records as present in certain counties in England and Wales, is presumably, as we have attempted to show, not due to any real declination of the disease, but rather to such causes as can be explained by special local predisposition to other diseases, to which a large proportion of the adult population succumb. 4.—That in consequence of this, if each district of England and Wales were equally healthy, each would probably exhibit a high cancer mortality. 5.—That the geographical area of which England and Wales is composed, is insufficient to account directly for interruption in the distribution of cancer as met with in this island."

ON THE LOCALIZATION OF CEREBRAL AND SPINAL DISEASES.—Dr. J. M. Charcot, in his "Lecture delivered at the Faculty of Medicine of Paris," translated by Dr. Hadden (*Brit. Med. Jour.*), has this to say in regard to the regional pathology of the nervous system:

Lesions limited to either of the gray central nuclei without implication of the internal capsule, cannot at present be recognized by special clinical features. Hemiplegia consequent on circumscribed alterations of the gray nuclei is generally transitory, *i. e.*, defined, non-persistent and comparatively mild. Lesions of the internal capsule, on the contrary, usually give rise to the marked and persistent form of cerebral hemiplegia, even when of very inconsiderable size. When the lesion involves any part of the anterior two-thirds of the capsule, there will be motor paralysis only and no permanent disturbance of sensation; while, if the posterior third of the posterior segment of the capsule be affected, cerebral hemianæsthesia may be the only permanent symptom, where the most distant and posterior parts of the capsule alone are definitely affected.

Surgery.

CASE ILLUSTRATING THE VERMICULAR MOTION OF THE URETHRA.—Henry P. Winzel, M. D., (*Medical Herald*, Aug. 1883,) gives the following case of his own:

Case I. In June, 1881, a carpenter fell a distance of 48 feet from the exposition building, striking on his neck and shoulders.

When I saw the case an hour after the accident, the man, though conscious, was completely paralyzed in both motion and sensation from the axillæ down; there was slight motion and sensation in the arms. He could speak feebly; motion of the head caused excruciating agony, and there was total abolition of reflex irritability below the axillæ. The feces passed involuntarily, and the bladder was apparently paralyzed, as he had neither the desire nor power to urinate, although the viscus was distended. There was an almost continuous priapism until his death eleven days after the accident.

The urine was withdrawn thrice daily with a number ten English soft rubber catheter, 15 inches long. On the sixth day, after the urine was partly drawn and the flow from the catheter ceased, we, with the assistance of the nurse, attempted to roll him over on his side, and while so doing the catheter, projecting over three inches from the meatus urinarius, suddenly disappeared within the urethra. By instant and careful manipulation, I succeeded in arresting its further movement toward the bladder at the membranous portion of the urethra and successfully removed it with a long uterine dressing forceps, which was, fortunately, in my pocket.

After collating from other cases he concludes as follows:

Undoubtedly the vermicular action plays a very important part, impelling the catheter toward the bladder, but there are other factors which assist in or increase the action. When a large-sized sound is introduced a certain distance into the urethra, it is, as it were, "swallowed" by that channel, but it will not enter the bladder by vermicular action alone; its own weight is an important factor, because the sound is arrested by the direction of the urethra; and the triangular ligament, prostate gland, and vesical sphincters resist the onward progress of the instrument. But when an elastic tube or soft rubber catheter is used another prominent factor is added to "vermicular action," dilation of urethral canal in front of and at point of the instrument. This suction is partly caused by "vermicular action;" but the catheter is hollow, and its cavity filled with air, on which a certain amount of (atmospheric) pressure is exerted. We have, then, suction and pressure, and the urethra becomes dilated, though little it may be; the "vermicular action" is increased by closer hugging of the whole length of the instrument within the urethra; and the catheter advances toward the bladder. Change of

position, too, necessarily influences the motion of the catheter; especially is this true when the patient himself (or herself) changes position, or is changed by the attendant, whether it is the pelvis alone or the upper part of the body, or both. Aspiration of air through the catheter is also possible during the respiratory act, and a change of the lower abdominal and pelvic viscera also occurs, although to a limited extent only, in every inspiration and expiration. Hence by this pump-like action atmospheric air is not only drawn through the catheter toward the bladder, but the catheter itself is impelled in a similar direction.

In case I. the catheter would, in all probability, not have been impelled so rapidly toward the bladder if the patient had not been rolled on his side; the change of position, plus the force given by the syringe used, caused the same result in case V.; besides, no one can inject his own bladder without motion of the pelvis, or, to say the least, without moving the penis.

Of course the female urethra is much shorter and straighter than the male, and the catheter "unyoked" may easily slip into the bladder, considering all the factors at play in the act. Therefore the safeguard of securing the catheter with a thread or string to the pubic hair, counteracts the acting forces in attempting to overcome the obstacle, and the catheter remains *in situ*.

When the urine has been partly withdrawn, and the bladder is, as it were, paralyzed, the respiratory act, pump-like, could easily fill the bladder, because the resistance to distention is destroyed, and a soft rubber catheter may gain access into the bladder by "vermicular motion," the respiratory act, change of position, and muscular contraction by a suction force.

The sensitiveness of some urethrae is remarkable, as I have observed when introducing any kind of catheter. Sometimes reflex phenomena are marked; and I have on several occasions witnessed penile erection while catheterizing the patient. The turgidity of the virile organ markedly elongates the urethra, and the "erect" tissue firmly grasping the catheter would favor "vermicular action," and the different muscles of the penis and neck of the bladder would also aid the "advance of the catheter toward the bladder" by the spasmodic motion of the organ.

CONGENITAL MALFORMATIONS OF BOTH KNEE-JOINTS.—Mr. Hubert Sells (*British*

Medical Journal.) describes the following case of malformation in a new-born infant, very fairly developed: On looking at the lower limbs, the first thing that struck one was, that the patellæ on both sides were apparently missing, and in their place was, on each limb, a depression. The description of one limb will suffice for both. The movements of the hip-joints were complete. The thigh, instead of being convex, was slightly concave on its anterior aspect. The tibia and fibula were in their normal relative positions. The foot looked forward naturally, and the ankle-joint was normal. The patella was placed at the back of the joint instead of the front. In the normal position of the patella was the depression above mentioned, which apparently represented the popliteal space, as the continuation of the femoral artery could be felt pulsating here, and there were some tendons on either side of it, analogous to the hamstring tendons. There was also, running down a little to the inner side of the centre of this space, a strong tendon, which was continued downwards to the head of the tibia, and may have been the representative of the quadriceps extensor tendon. Posteriorly, the patella was rather firmly fixed, nearer the femur than the tibia, in a strong tendon, so that the impression at first was that it (the patella) was attached by osseous tissue to the femur. This idea was, however, dispelled on moving the joint. The movements of the knee-joint were perfect but reversed. The tendon in which the patella was fixed was exactly like the ordinary extensor tendon of the thigh. The artery could not be traced below the head of the tibia. It may, I hope, be seen from the above description, that the leg could be flexed on the thigh anteriorly, as much as it would have been posteriorly in the normal state. When the child was first seen, it had the toes of one foot almost in its mouth, which, of course, it could reach easily without flexing the thigh. The child died on the third day after birth, and, unfortunately, the parents would not consent to a *post mortem* examination.

THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM. Mr. W. J. Walsham, F. R. C. S., (*Brit. Med. Jour.*) "During the past autumn, whilst in charge of Mr. Willett's wards, it fell to my lot to tie the femoral artery three times for popliteal aneurism. In each instance two ligatures were applied, a

little less than half an inch apart, and the artery completely divided between them. The ligatures used were kangaroo-tail tendon; the wounds did well; the operations were performed strictly antiseptically; and in each instance the patient made a good recovery. If two ligatures be applied, and the vessel divided between them, all risk of too free a separation of the sheath is absolutely avoided, as one ligature can be applied at the spot where the sheath is separated above, and the other where the sheath is separated below. After the vessel is divided, each cut end retracts, drawing the respective ligatures well into the sheath, thus leaving the blood-supply of no portion of the vessel on the proximal and distal side of the upper and lower ligatures respectively in any way interfered with. The artery is thus placed under very nearly the same conditions as one which has been ligatured in a stump, and exactly under the same conditions as one the ends of which have been secured in a wound, and from such secondary hæmorrhage is very rare. Indeed, I am not aware that, after the two ends of a divided vessel have thus been tied in a wound, hæmorrhage, except from the slipping of a ligature, has ever occurred. The normal longitudinal tension of the vessels constitutes another, and, I believe, not inconsiderable source of danger in ligaturing an artery in its continuity. A transverse wound of an artery, as first pointed out by Mr. Savory, in consequence of this elastic tension, assumes a diamond shape. Should any part of the ligature cut through the vessel before it has become permanently occluded, this tension, by causing such a cut in the vessel to gape, thereby disturbing the connection of any internal clot that may have formed, or adhesions of the coats that must have taken place, must tend to the production of secondary bleeding. In a case of secondary hæmorrhage, under the late Mr. Callender, on cutting down at the seat of ligature to secure the bleeding points, the hæmorrhage was clearly seen to be due to such a cause. The vessel, which had been secured by a catgut ligature, had given way opposite the knot (which itself was intact), and a gaping wound one-tenth of an inch wide existed in the walls of the vessel. By applying two ligatures, and dividing the vessel between them, all tension is taken off, and both ends are placed in a state of rest—the most favorable condition for healing. It has been objected that the application of a second ligature and division of the artery detracts from the simplicity of the operation

—a point, I suppose, other things being equal, always to be aimed at in surgery. In this instance, such an objection appears to me to be a mere question of sentiment, and, as such, I venture to think, is of little moment, if, as I believe, it is a fact that, by using two ligatures and dividing the artery between them, greater safety is obtained."

QUESTIONS RESPECTING INTRA-CAPSULAR FRACTURE OF THE FEMUR.—These are asked by Dr. E. M. Moore (*Medical News*):

1. Is not the cause of fracture of the neck of the femur, whether intra or extra-capsular, almost uniformly that of a blow upon the trochanter?

The writer insists upon this statement, in contradiction to the views of Sir Astley Cooper, and also that the cases of fracture, either by muscular exertion alone, or by falls upon the knee, or a misstep, with direct force transmitted through the bones of the limb, are too rare to be the grounds for any diagnosis.

2. Is not the preservation of the periosteum of the neck, called in connection with the reflected capsule the cervical ligament, although only partial, the common rule and not the exception?

This statement was confirmed by the exhibition of three specimens of recent fractures—one of three days, one of five days, and one of eight days after the fracture. These were all the writer had ever seen and were all in the same condition.

3. Does not this condition, if preserved, supply nutrition to the upper fragment amply sufficient for entire repair?

This question is asked in reply to the opinion that the nutrition in intra-capsular fracture must depend upon the small circulation of the ligamentous tissues. If the cervical ligament remains in even a small part, there cannot be any deficiency of nutriment.

4. Is not the outer layer of what is called the periosteum of the neck, a rudimentary organ?

This opinion is defended on account of the uniform rise of the capsule from the edge of the articulations. The general law is interfered with by the length of the neck of the bone. Nature has laid down firmly on the periosteum, but retains the primary thought.

5. In reputed cases of absorption of the neck after blows upon the trochanter, said to be without fracture, is it reasonable, much less a perfect induction to infer a similar result, when the changes of condition are simi-

lar only in one point and dissimilar in every other, from those cases of inflammation without a blow?

This was proved by the exhibition of cases of recent fracture.

6. Should not the induction read thus: The head of the femur and the acetabulum, not being altered, the shortening of the neck could not be from the inflammation resulting from the blow.

7. Finally, does not the practice of modern surgery produce a vastly improved result, in cases reported, as compared with the methods of the past generation?

EXCISION OF THE CHANCRE.—Dr. Morris *Jour. Cutaneous and Venereal Diseases*, Dec. 1882), concludes the study of this subject thus:

1st. That the facts of clinical experience, as well as deductions from analogy and experiment are opposed to the theory of the local nature of chancre, upon which the practice of excision is based.

2nd. That the practice of excision of the chancre, as a means of aborting syphilis, is condemned by its clinical results, when these results are weighed in the balance of discriminating judgement, due regard being had to the possibilities of error.

3d. That the sources of danger are comprehended under doubtful diagnosis, insufficient observation, both as regards time and method, and *post hoc* conclusions.

4th. That in cases where secondary accidents fail to appear after excision, there is no positive evidence that it had an abortive influence, since experience proves that sores with all the typical signs of infecting chancre, are sometimes not followed by constitutional syphilis.

5th. That there is no evidence that excision of the chancre attenuates the syphilitic virus and modifies the intensity of general symptoms, since the benignity or malignancy of syphilis is a matter of individual constitution.

6th. That it cannot be recommended as a local adjuvant, since it is opposed to the principles of sound surgery to remove, by an operation involving loss of tissue, and an indelible cicatrix, an accident which always disappears by a process of spontaneous resorption, leaving, as a rule, no posthumous evidence of its existence.

ON THE ANATOMY, SURGERY, AND HYGIENE OF THE RECTUM.—Dr. Eastman (*Am.*

Prac.), in an able paper on the above subject, concludes as follows:

1. That the rectal anatomist dispense with his drawings exhibiting the rectum distended, or borrow the contracting power of Thomas, and add one with it closed.

2. I would urge the rectal surgeon (for purposes of diagnosis and operation) to utilize the expansive genius of Sims in throwing the rectum open.

3. I would urge humanitarians to insist that at least one-third as much time be given to unloading the alimentary canal as they take in filling the same.

4. I believe it is the duty of philanthropists and sanitarians, especially such as are so anxious to serve on boards of health, to see that water-closets invite, not repel. Health boards should inspect every store, factory and place of business, to see that clerks and employes, male and female, have such privacy and privileges of access to closet accommodations as the importance of the case demands.

5. I would beseech of doctors, philanthropists, sanitarians, and all others interested in humanity, to teach on all proper occasions the pernicious consequences of carrying a load of feces in the bowel, until it is absorbed, and its odor escapes from the emunctories of the skin, or adds to the not infrequent unpleasant aroma of the human breath.

COMPOUND FRACTURE OF THE FEMUR, Erysipelas, Pyæmia: AMPUTATION OF THE THIGH: SUBSEQUENT EXARTICULATION AT THE HIP: COMPLETE RECOVERY.—Arthur E. Barker, F. R. C. S. Eng., (*Brit. Med. Jour.*), describes a case, under this title, at great length; the patient was a riveter, aged 29, who fell from a roof and fractured his femur. The case illustrates, in the first place, what is, however, unfortunately rare in experience, namely, the possibility of recovery from pyæmia, even in a patient weakened by a most severe injury, prolonged suppuration, and an attack of erysipelas. Secondly, it illustrates the feasibility, in some cases, of amputating with the best results through the thigh for compound fracture, leaving a second compound fracture in the neighborhood of the hip-joint to be treated otherwise later on, when the first amputation wound is healed. Thirdly, it shows that, in such a case, it is possible to exarticulate the whole of the remaining bone up to the hip-joint, without reamputation through the soft parts, but through a moderate opening in the outer side of the stump.

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Original Communications.

An Analysis of One Hundred Cases of Labor.

BY A. W. NICHOLSON, M. D.

Analyses of ordinary cases in the practice of medicine and surgery, if they do not possess the charm of novelty, at least supply facts that may enable the physician to proceed more wisely in regard to conditions with which he is brought in contact. The young practitioner is especially harrassed with the subject of "probabilities" appertaining to some of the series of analagous cases sure to be introduced at the very portal of the way that leads him into his professional career.

With the object of presenting the history of such a series, or of a fraction of such a series, of cases occurring in an ordinary country practice, I have taken from my record-book some particulars of a hundred cases of labor that were nearly consecutive in their occurrence. Cases where the period of gestation was too short to render possible the viability of the child, and a few cases where too few particulars were collected for tabulation, are omitted from the classification.

The following table is so arranged as conveniently to give answers to seven inquiries pertaining to each of fifty-seven cases of multiparæ, and of forty-three cases of primiparæ; they are, therefore, not arranged in the order of their occurrence. The limited number of the cases may make this presentation of little value to the social statist, and to the biologist, yet I trust it may possess some value, and that it may prove of interest to the physician in practice.

The conditions specified in the table may be summarized as follows:

AGE OF MOTHERS AT LAST BIRTH-DAY.—According to this record the age of the youngest mother among the multiparæ was 19 years. With this exception, the ages of mothers among multiparæ exceeded 21 years. The eldest in this class was 40 years. The average age among them was 28.4 years.

Among the primiparæ the youngest was 15 years of age and the eldest 35 years. Of this class twenty, or nearly half, were under 21 years of age. Their average age was 21.5 years. The age of one was not recorded.

PRESENTATIONS.—With one exception in this series the presentations were in some axis of the vertex. This may appear somewhat anomalous; yet, it is what might be likely to occur in nearly any other one hundred cases, the usual proportion of vertex presentations being, on the average, according to Madame Boivin, ninety-six, and H. Dubois, ninety-five in one hundred cases. With a few exceptions, the vertex presentations were of the first position, or left occipito-cotyloid. In two instances the position was not recorded. In two it was in the second position, or right occipito-cotyloid. In one of these latter (case 41, of the multiparæ), the duration of labor was short; the foetal heart-sound was distinctly heard upon the right side, and the placental souffle upon the left. In the other (case 36, of the primiparæ), the labor lasted six and one-half hours after my arrival at the bedside. In this case no particulars were recorded in relation to the sound of the foetal heart, or the placental murmur. In three cases the presentation was in the third position, or, right occipito-sacro-iliac. In each of these three cases the foetus was a female, one was among the multiparæ (case 17), and two were among the primiparæ (cases 7 and 42). In the first and second the duration of labor was six hours, and in the last, five hours. There were two instances of vertex presentation in the fourth position, or, left occipito-sacro-iliac. These were cases 15 and 21 among the primiparæ. In case 15, the os uteri was dilated one and one-half inches at the first examination. The labor was completed in one hour. In case 21, the dilatation of the os amounted to one inch at the first examination. Seven hours elapsed before the expulsion of the foetus. Anæsthetics and the use of the forceps were required, and the foetus was still born. There was, in this case, a considerable, but incomplete, rupture of the perineum. In these two presentations

the foetuses were females. The only face presentation recorded in this series was among the primiparæ. In this case (37), both the first and second stages of labor were protracted, and the forceps were employed. The foetus was large, a male, and still-born. The average weight of the mother was about one

hundred pounds, and the weight of the child was ten and one-half pounds. In this case, also, there was a considerable rupture of the perineum. In two other confinements in which I attended this lady, the presentations were vertex, and face, respectively—both children living.

TABLE—SHOWING SOME PARTICULARS CONCERNING ONE HUNDRED CASES OF LABOR.

MULTIPARÆ.

Number.	Age of mother last birthday.	Length of period of gestation.	Presentation.	Dilatation of os uteri on first examination.	Duration of labor after first examination till expulsion of foetus.	Sex of foetus.	Foetus living or still-born.	Number.	Age of mother last birthday.	Length of period of gestation.	Presentation.	Dilatation of os uteri on first examination.	Duration of labor after first examination till expulsion of foetus.	Sex of foetus.	Foetus living or still-born.
1	25 yrs	9 mths.	Vertex.	3 inches.	3 hrs.	Male.	Living.	30	26 yrs	9 mths.	Vertex.	1½ inches.	2½ hrs.	Male.	Living.
2	23	"	"	3	1½	"	"	11	26	"	"	Complete	2	Female	"
3	28	"	"	1½	2½	Female	"	32	30	"	"	1½ inches.	2	"	"
4	30	"	"	1	12	"	"	13	25	"	"	1	2	"	"
5	30	"	"	1	4	"	"	14	25	"	"	Complete	1½	"	"
6	35	"	"	1	3	Male.	"	35	35	"	"	None.	8	"	"
7	35	"	"	1½	3½	"	"	36	31	"	"	1½ inches.	2½	"	"
8	26	"	"	1½	14½	"	"	37	35	"	"	"	"	"	"
9	26	"	"	1	"	"	"	38	26	"	"	1½	4	Twin	"
10	35	"	"	1	1	"	"	39	30	"	"	"	4	Males.	"
11	25	"	"	1	6	"	"	40	26	"	"	Complete	1½	Female	"
12	22	"	"	1	"	"	"	41	26	"	"	2 inches.	1	"	Still-born.
13	30	"	"	1	"	Female	"	42	34	"	"	1	3	Male.	Living.
14	10	"	"	2	1½	Male.	"	43	35	"	"	1	3	Female	"
15	30	"	"	2	"	Female	"	44	30	"	"	1	"	"	"
16	20	"	"	3	1	"	"	45	32	"	"	Complete	1½	"	"
17	34	"	"	2	6	"	"	46	29	"	"	1½ inches.	2	"	"
18	28	"	"	2	2	Twin females	still-born	47	25	"	"	None.	22	"	"
19	24	"	"	2	2	Female	Living.	48	25	"	"	Complete	1	"	"
20	25	"	"	2	4	"	"	49	26	"	"	1	1	"	"
21	25	"	"	2	1½	"	"	50	21	"	"	1	1½	"	"
22	25	"	"	1½	8	"	"	51	32	"	"	1 inches.	3	"	"
23	29	"	"	1½	3	Male.	"	52	38	"	"	1½	2½	"	"
24	38	"	"	1	2½	"	"	53	23	"	"	1½	1	Male.	"
25	40	"	"	1½	4½	Female	"	54	22	"	"	Complete	2	"	"
26	30	"	"	1	"	Still-born.	"	55	20	8½	"	Complete	¾	"	"
27	35	"	"	2	"	Living.	"	56	36	"	"	1 inch.	4	Female	"
28	24	"	"	3	1½	"	"	57	26	"	"	1½	2½	Male.	"
29	32	"	"	2	1½	"	"								

PRIMIPARÆ.

Number.	Age of mother last birthday.	Length of period of gestation.	Presentation.	Dilatation of os uteri on first examination.	Duration of labor after first examination till expulsion of foetus.	Sex of foetus.	Foetus living or still-born.	Number.	Age of mother last birthday.	Length of period of gestation.	Presentation.	Dilatation of os uteri on first examination.	Duration of labor after first examination till expulsion of foetus.	Sex of foetus.	Foetus living or still-born.
1	19 yrs	9 mths.	Vertex.	1 inches.	10 hrs.	Male.	Living.	23	20 yrs	9 mths.	Vertex.	1 inches.	6 hrs.	Female	Living.
2	20	"	"	3	1½	Female	"	24	26	"	"	1	24	Male.	"
3	21	"	"	3	4	"	"	25	19	"	"	3	1½	"	"
4	17	"	"	12	12	"	"	26	25	"	"	3	2	"	Still-born.
5	21	"	"	1	"	Male.	Still-born.	27	25	"	"	1	9	"	Living.
6	—	"	"	1½	18	"	Living.	28	22	"	"	1	6	Female	"
7	20	"	"	1	6	Female	"	29	22	"	"	1	12	Male.	"
8	21	"	"	1	6	Male.	"	30	22	"	"	2	2	Female	"
9	22	"	"	2½	1½	Female	"	31	21	"	"	1½	3	Male.	"
10	18	"	"	1½	3	"	"	32	25	"	"	1	6	"	"
11	10	"	"	2	2	"	"	33	35	"	"	1½	8	Female	"
12	19	"	"	Complete	1	Male.	"	34	31	"	"	1½	5	"	"
13	29	"	"	1 inches.	3	"	"	35	25	"	"	2½	1½	"	"
14	19	"	"	1½	9	Female	"	36	19	"	"	2	6½	"	"
15	23	"	"	1½	1	"	"	37	22	"	"	1	36	Male.	Still-born.
16	18	"	"	1½	6½	"	"	38	18	"	"	2	1½	"	Living.
17	24	"	"	1	4	"	"	39	15	"	"	1	3	"	"
18	18	"	"	1	4	Male.	"	40	21	"	"	Complete	2½	"	"
19	18	"	"	1½	3	"	"	41	20	"	"	2 inches.	1	Female	"
20	18	"	"	Complete	¾	Female	"	42	27	"	"	1	5	"	"
21	19	"	"	1 inches.	7	"	Still-born.	43	18	"	"	Complete	1-12	Male.	"
22	17	"	"	2½	1½	Male.	Living.								

Spontaneous change from face to vertex presentation occurred in case 43 of the multiparæ. At the first examination the os uteri was found patulous, and dilated to the extent of one inch. The face was found presenting with chin directed towards the symphysis pubis. Immediately after the examina-

tion the patient, desiring to void urine, got up, she having been disposed to occupy the bed. While in an upright position a strong movement of the foetus caused her to cry out. On returning to her couch, the pains becoming unusually severe, I proceeded to another examination and was aston-

ished to find the vertex presenting in the natural way. This conversion from face to vertex presentation was sudden, and evidently did take place by forcible pressure through points offering the least resistance, as in cases spoken of by M. Guillemot. The presentations in the cases of twins were as follows: In one instance the vertex of one fœtus presented in the first position and that of the other in the third. In the second instance the presentations were in the first and second positions respectively.

EXTENT OF DILATATION OF THE OS UTERI ON FIRST EXAMINATION.—In every instance this was determined during the labour pains. Among the multiparæ, at the time of the first examination, the os was found completely dilated in eight instances, and, in two, no dilatation was perceptible. The average dilatation found among the multiparæ, at this time, was one and four-tenths inches. Among the primiparæ the dilatation was found complete in four cases. In every instance, in this class, there was found some dilatation. The average dilatation of the os uteri among the primiparæ was, also, one and four-tenths inches, the same as with the multiparæ. In nearly one-half of both classes the dilatation did not exceed one inch at the time of first examination.

DURATION OF LABOUR AFTER ARRIVAL AT THE BEDSIDE TILL EXPULSION OF FŒTUS.—In the category of anxious inquiries that present themselves to the minds of both physician and patient in cases of parturition none is of greater interest than: "What will be the probable duration of the labour?" The character of the answer to this inquiry must greatly depend upon the condition of the patient when first seen by the accoucheur. To this end data pertaining to the condition of os uteri at this time were incorporated in the record.

Among the multiparæ the longest duration of labour after the first examination was twenty-two hours. In this case the os had not commenced to dilate, and the first stage of labour was lingering. The shortest time required for the expulsion of the fœtus, in this class, after arrival at the bedside, was fifteen minutes, the dilatation of the os being found complete. The average duration of labour among the multiparæ, in accordance with the record, was three hours and six minutes. Among the primiparæ the longest time required for the expulsion of the fœtus was thirty-six hours. The presentation was one

of face, previously mentioned. The shortest duration of labor in this class, as recorded, was five minutes, the dilatation of the os uteri being complete, and the vertex presenting at the perineum. The average duration of labor among the primiparæ, after the first examination until the expulsion of the fœtus, was five hours and forty-one minutes, or two hours and thirty-nine minutes longer than with that of the multiparæ.

SEX OF FŒTUS.—In both classes together there were forty-two male and sixty female children born. This number includes one case of male twins and one case of female twins among the multiparæ.

FŒTUS LIVING, OR STILL-BORN.—In fifty-six cases among the multiparæ, the fœtus was born living, and three were still-born. Among the primiparæ there were thirty-nine living-births and four still-births.

ANOMALOUS CASES.—Case 7 of the primiparæ had, for some time preceding accouchement, marked chorea. Under the use of conium and hygienic treatment, this was greatly relieved, and it entirely disappeared soon after delivery. Case 27 of the primiparæ was one of irregular contraction of the uterus, and required the forcible dilatation of the stricture and separation of the placenta, which was, to the extent of about two square inches, firmly attached near the fundus. The stricture was above the os internum, a portion of the placenta protruding below. No anæsthetic was employed, and no extreme distress attended the removal of the placenta. The uterus properly contracted on the removal of the secundines. The two most generally specified causes for the irregular contraction of the uterus in the third stage of labor are, incautious administration of ergot, and undue traction upon the funis. To neither one of these causes could this particular accident be attributed. Ergot was not employed, and the contraction occurred immediately after the expulsion of the fœtus. A similar accident occurring in my practice the following year may have been caused by the previous administration of some ergot, but I do not consider that it was incautiously administered. The evidence in both cases seems to point to the firm adherence of a portion of the placenta to the uterus as a cause, the placenta resisting all the natural efforts for its expulsion.

In case 25 of the multiparæ, the cord was but *ten* inches in length. The placenta had a natural appearance, with the exception of two cotyledons in the membranes adjacent to

the border of the placenta proper. The fœtus was small, and had but two fingers on one hand and three on the other. The hands were immovably flexed at the wrist, their palmar surfaces resting upon the fore-arm. There was a history of tubercle on the mother's side, and the father was a confirmed epileptic. There were three other living, one of whom showed a marked tubercular diathesis. Case 39 of the primiparæ became enciente when fourteen years and three months of age, and had just passed her fifteenth birthday when she was confined. Her nativity was Irish. Of the one hundred cases this was the only one where eclampsia occurred. The spasms came on suddenly, were clonic, and occurred at the moment the head began to press upon the perineum. The forceps were applied, cold, without delay, and on the immediate delivery of the head of the fœtus, the spasms ceased. No other means of relief were adopted but to deliver the fœtus. There were no dropsical symptoms. The mother made an easy recovery, and no injury occurred to the child. One year and twenty-three days subsequently I was called to attend her again in confinement. This made her a multipara at the unusually early age of seventeen years. Considering the special and immediate call for the use of the forceps at her first confinement, if there is any moral to be associated with the history of this case, it is, when called to attend a case of labor always carry your forceps with you. In case 51 of the multiparæ, there was an umbilical hernia of long standing, and, apparently, fatty degeneration of the muscles of the abdomen. During the latter part of the first stage of labor, owing to the absence of aid from the abdominal muscles, at each pain the uterus was thrown outwards and forwards above the symphysis pubes in the most alarming manner. Artificial pressure aided in the advancement of the labor, and, as soon as possible, the forceps were applied.

The fact that there were seven cases of still-births in these one hundred cases of confinement, naturally would elicit comment. Two of them were forcep cases, and, of uncommon presentation, previously referred to. One occurred in a case of badly nourished twins. In one instance the accident could not be accounted for. In one it seemed due to a prolonged first stage of labor. One was explained by the evidence of extreme malnutrition in the fœtus, the mother having been an invalid for several months previous to the

confinement. The other still-birth was related to case 26 of the multiparæ, and was one of considerable interest. It was one of dropsy of the amnion. When I arrived at the bedside the patient had been in labor twenty-four hours. On inquiry as to the frequency of the pains she replied, "It's all one pain!" According to her testimony there had been no intermission in the contraction since the labor began. The os was dilated to the extent of an inch, and the uterus was greatly distended. I ruptured the membranes at once, when the vertex pressed down on the os preventing any escape of the liquor amnii. Even after the rupture of the membranes there was one continuous contraction until the expulsion of the fœtus, which occurred three hours thereafter, with a great discharge of the waters. Had the membranes been ruptured earlier, the mother would have been relieved, and the life of the child possibly have been saved.

Extreme rigidity of the os uteri occurred but in a few instances. There was a considerable, but incomplete rupture of the perineum in two of the cases. The use of the forceps was limited to eight cases. There were no cases of extreme dropsy, or of typical puerperal fever. Anæsthetics were employed in the most severe cases. In nearly every instance the fœtal heart-sound was discernible; the placenta souffle less frequently. No death of the mother occurred among the number. Excessive hemorrhage occurred in three cases after the termination of the second stage of labor.

Menstruation A Pathological Process.

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(Read before the Defiance County Medical Society.)

In regarding menstruation as unphysiological, I am aware that it is contrary to generally received doctrine.

That the menstrual flow is universally regarded as physiological, is evident from the fact that its discussion is universally found in works on physiology and not among the productions of pathologists—except incidentally, to elucidate the subject—as when introductory to uterine disorders.

Viewed in the light of physiology, no theory has ever been advanced that has proven satisfactory.

Briefly speaking, the changes that take place in the uterus *previous* to menstruation are a gradual increase in the size of the organ

—with vascular turgescence—and hyperæmia and thickening of its lining membrane. Coincidentally with these changes in the uterine tissues, which thus far are physiological, an interesting work is progressing in the ovaries, viz: The maturation of a Graafian follicle; which, when complete, results in its rupture and the escape of its contained ovum.

Now nature has made ample provision for the propagation of the species in every instance. The function of the uterus is to contain the fecundated ovum during its development into a being capable of independent life. It has no other office to perform in nature, except (I may add) its action in parturition.

While the ovum in the Graafian follicle is maturing sufficiently to change its habitation from the ovary to the uterus, the latter organ being apprised of what is taking place (through the generative nerve center), is preparing to receive it. Hence the changes in the uterine tissues before referred to, for the purpose of providing nutriment for its new inhabitant.

When the ovum is ripe it leaves its first abode, seeking for its mate—the spermatozooids from the male. Nature's plan is that the ovum shall be met by this fecundating element. Now if its anticipations are realized a new life is given it, and on reaching the uterus where preparations have been duly made for its reception—a nidus for its lodgment, abundant nutriment for its sustenance—it takes up here its abode, appropriating to itself the nutriment in store for it and constantly receiving more.

If, however, the plans of nature are foiled,—if, in its search for its mate it is disappointed—the entire system is thrown into embarrassment. The ovum is not in condition to receive the nutriment in store for it, the uterine membrane becomes more and more enlarged, its epithelial covering undergoes a partial fatty degeneration, the cells are thrown off, the distended capillaries rupture and the nutriment accumulated wasted. This is menstruation. It might be called a pseudo-abortion.

Had the ovum been fecundated as nature anticipated, no hemorrhage would have occurred, but had death of the fecundated ovum followed within a month there would have been what we call a true abortion. Hemorrhage would have been but little greater and the ovum might have easily escaped unnoticed.

The difference, then, between menstruation

and abortion is that with the former a non-fecundated ovum is lost, and with the latter one that has been fecundated. The first is pathological since it would not have occurred had nature's plans been realized. The second would not have occurred but for some abnormal action.

It is in harmony with all nature to assume that the ovum was expected to develop and not be destroyed, and its destruction at any period of its existence, either during its development in the Graafian follicle, in the early weeks of intra-uterine life, or after the period of quickening, should be regarded alike as calamities which will cause the uterus to become arrested at whatever period of its physiological growth the calamity occurs. The period of quickening has been regarded as the beginning of a new era in the life of the embryo. The time of conception should be regarded, likewise, as the beginning of a new era in the life of the ovum. So when the ovum in the Graafian follicle begins to develop it is expected to pass through these eras. If this development is interrupted before the beginning of the second era—that following conception—menstruation or a false abortion is inevitable. If the interruption occur during the second or third era, the result is spoken of as an abortion.

The death of the ovum during any one of these periods of its development should be looked upon as a misfortune, and the resulting loss of blood a pathological process.

If this periodic loss of blood is physiological, what is gained? Is the female sex so much better supplied with blood, than males that they need this periodic depletion? On the contrary it is here that we find anæmia and chlorosis most frequent.

All normal fluxes are either secretions or excretions. This is neither. It is not a secretion since it fulfills no further use in the system, but leaves the body at once. It cannot be called excretion since excretions are non-nutritive substances eliminated from the body, while this is the blood itself.

This nutritive has no further use in the system than to nourish the fecundated ovum. If not needed for this purpose it must leave the system. It does so, as we have seen, usually through the uterine mucous membrane, but so necessary is it that this material,—now foreign to the system,—should leave it, that if any obstacle to its escape at this place exists it will seek another outlet. Hence we have vicarious menstruations.

Example of the hemorrhage occurring from locations other than the uterus, are by no means uncommon. They show that the menstrual blood is foreign to the body when not used for the purpose for which it is produced, and must have a means of escape. Vicarious menstruation has been known to occur from capillary nevi, when no obstacle to hemorrhage from the uterus was apparent. This, I think, shows that the interruption of nature's course affects not only the uterus, but the entire system, and that the escape of blood may take place at the weakest point. That there are constitutional disturbances, is also apparent from the fact that there are unmistakable signs of venous distension in certain parts. Women with varicose veins usually complain of a distended condition of those veins just before menstruation. Now, if this nutritive fluid can be put to its natural physiological use, this systemic embarrassment is avoided.

It is no uncommon occurrence for women to become pregnant during lactation without having menstruated since the last confinement. A woman married in September, 1859, menstruated the next month, but not again until June, 1870. In the interval she had six healthy children. Another woman married in January, 1856, and menstruated but three times during the next fourteen years and six months, but gave birth, notwithstanding, to nine children during that time. *In these cases the women had menstruated regularly until marriage.*

Now, these and similar cases with which the profession in general is quite familiar, can only be explained by supposing that when the first ovulation after delivery, and during lactation, occurred, the ovum was met by the fecundating germs, and, as a result, fatty degeneration of the cells of the uterine mucous membrane, hemorrhage, etc., were avoided. Nature triumphed. A *false abortion* was prevented.

Medical literature furnishes numerous instances of pregnancy occurring before menstruation had appeared. Many of these are adults, whose generative organs may have needed the stimulus of coitus to rupture a graafian follicle. Others were healthy girls from eleven to seventeen years of age. I find one recorded case at nine years of age. How are these cases explained? Simply by saying that impregnation took place at the time of the first ovulation. Had nature's plans been disregarded, the ovum in each

case must necessarily have perished; and, instead of a physiological development, a pathological degeneration and hemorrhage would have been inevitable.

I think these cases would be very common indeed were it not for the fact that, according to social customs, marriage is usually delayed several years after the menstrual function is established.

The Hindoos require their daughters to marry before the appearance of the menses; since, with them, every menstruation occurring in a girl who has not had the opportunity to conceive, is regarded as infanticide.

Is it not possible that they are in a measure correct? While I would not advise early marriage to prevent loss of non-fecundated ova, I would suggest that, while the profession is endeavoring to prevent the destruction of products of conception in various stages of development, we, at the same time, use equal means to show the physical and moral evils of destroying a non-fecundated ovum by the various means employed for the prevention of conception. A non-fecundated ovum, with the germinating material in close proximity and conditions favorable for growth, stands, I may say, an equal chance with the embryo, of developing into independent life.

Menstruation should be regarded as unphysiological, because women at this time are *not well*. It is significant that they themselves speak of being "unwell." A physiological process should not interfere with health. I doubt whether it *ever* occurs that a woman is as well during a menstrual epoch as at other times. If there are occasional exceptions, they but prove the rule. In fact, the symptoms of what is called normal menstruation differ from a true abortion only in degree, and the earlier the abortion, the less the degree of difference.

That removal of both ovaries causes disappearance of the menstrual symptoms is, it seems to me, proof positive that menstruation is dependent on ovulation. The exceptional cases, of women continuing to menstruate after the removal of both ovaries, do not disprove the theory, but may be explained by supposing that after years of menstruation the uterus acquires a habit of periodic congestion, which may continue for a time after the cause which produced it has been removed. This explanation is strengthened by the well-known fact that women very commonly become sterile some time before the cessation of menstruation.

According to this pathological theory, menstruation and ovulation must be simultaneous, or nearly so. That impregnation *may* take place at any time during an interval, is no proof of the contrary, since we do not know how long an ovum remains in the uterus without being fecundated, or the duration of viability of the spermatozooids.

The experiments of Costa with female rabbits show that the Graafian follicle may remain unruptured until the end of the menstrual epoch. This, however, was when union with the male was prevented. The stimulus of coitus undoubtedly hastens the rupture of the follicle, and when the inclinations of nature are not disturbed there is little room for doubt that the ovum escapes much earlier—even before the appearance of the menses.

It is probable that it is not the ovum of the last menstruation that is fecundated, but that corresponding to the period following which has been prevented by conception.

Examples of pregnancy protracted to seemingly unusual lengths as 314 and 322 days respectively, in two cases reported by Leishman, can hardly be explained in any other way. In the first of these cases menstruation had been occurring at intervals of about six weeks. If impregnation took place at the time when the next period would otherwise have occurred, we have only to subtract the six weeks from the supposed duration of pregnancy (314 days) and it gives us the actual duration—272 days.

The question may be raised in the minds of some, that if menstruation is the loss of nutriment provided for the sustenance of so minute a being, why so much waste of blood? To this I will reply that the waste need not necessarily represent the amount stored up for that purpose, but that after the occurrence of the retrograde changes—fatty degeneration and rupture of capillary walls—a much greater hemorrhage would be likely to occur than would represent the amount in store for the physiological purpose for which it was intended.

As a last argument that menstruation is pathological, I will refer to woman's special and peculiar duty in procreation. On account of this all-important work which has been assigned by the laws of nature to the female sex, we see in them a special and characteristic action. During the whole of the child-bearing period, from puberty until the menopause, there is an over-production of nutriment. Nutriment that cannot be appropri-

ated by the system in which it is produced, what is it for? During pregnancy it is to sustain the life of the foetus in utero. During lactation it is to nourish the infant during its first months of independent life. After the child is withdrawn from this source of sustenance, the over-production continuing to supply the wants of another dependent being (*i. e.* the ovum which is expected to develop), must necessarily be wasted, unless the being is there to receive it. Now when this over-production is appropriated to its proper use, we have a physiological action; when it cannot be so disposed of, its waste is simply the manifestation of an interruption in nature's course, and is certainly pathological.

That these oft repeated pathological discharges are attended with so few embarrassments to the system is but one of the many evidences of the unparalleled wisdom of nature, in that these frequent interruptions were foreseen, and means provided to meet the consequences with the least possible constitutional disturbance. For the same reason, many women abort repeatedly, at frequent intervals for years, without materially affecting their general health.

Playfair says: "The cause of this monthly periodicity is quite unknown." Farther on he says: "To a certain extent it must be considered an accident or complication of ovulation produced by the vascular turgescence." Now if it is an *accident* it is not physiological, since physiological processes are not accidental appearances or complications.

Further he says: "It may seem to relieve the congested capillaries which are filled with a supply of blood for the great growth which takes place when conception has occurred." Here he has touched upon the exact object of the uterine turgescence, viz: "To provide for the great growth of the ovum," and we can anticipate what was the author's *a priori* reasoning, when the great growth of which he speaks is prevented. It could have been none other than that embodied in the substance of this paper—that pathological degeneration and hemorrhage would be the inevitable result. If it is to provide for a *growth*, certainly a growth is anticipated when the provision is made; and any interference with the progress of the project, at any stage, either before or after impregnation of the ovum will lead to defeat; and the generative organs, like the persevering spider, will try again and again, and if, at last, they are successful, then, and not till then, a complete physiological result will have been reached.

Misplaced Sensations. Two Remarkable Cases

BY DR. L. L. HOLCOMBE, TERREBONE STATION, LA.

HAVING just finished reading an article in the LANCET of the present month, by Dr. J. G. Kiernan of Chicago, on the subject of insanity, I am reminded, as Mr. Lincoln used to say, of another little story. The subject is misplaced or abnormal sensation.

One of the cases here related is peculiarly remarkable on account of the unimpeachable character and previous social standing of the individual: Mr. —, æt. about 50 years; had held the office of sheriff for nearly his whole manhood. He was popular to a peculiar extreme, and, like Mrs. Cæsar was, or should have been, above suspicion. This happy distinction he enjoyed until about two years ago, when, on a bright morning, his little town (about three miles from my present abode) was suddenly shocked as if by an earthquake, by a terrible revelation. This revelation found him guilty, in short, of a crime almost unnamable. Instantly an unspeakable disgust overspread the countenances of every one. What was this terrible charge? Not to put too fine a point upon it, he was guilty of the strange practice of exciting the passions of little boys and youths with his lips. He was waited upon by a self-styled committee in a few minutes after the discovery, and ordered to leave, at the hazard of being immediately lynched. Some of his most intimate friends interviewed him and he made a full confession of his guilt, and acknowledged, almost without the confusion of a blush, that rather than to give up the practice, he would be willing first to give up his life. He is a man of family, who are as respectable as any in the town. Subsequently it was developed, by the combined testimony of a number of boys of the place, that he was regularly in the practice of enticing them, by offers of money, into secret places, so as to be able to indulge his most disgusting habit.

Second case. A. Brazeau, a blacksmith, æt. about 32. Stout build; brunette; five feet three or four inches, and otherwise healthy, and apparently sane. He had been occupied for several months in 1882, as a blacksmith and wheelwright on the plantation of Mr. S. Craigan, near here. He was active, useful, and competent. Nothing was thought wrong of him until one day a little negro boy told the awful tale. The overseer

overwhelmed with a big and uncontrollable disgust proceeded to the shop and irately and unceremoniously kicked him off the premises. The man felt his guilt and "cleared the kitchen" succinctly.

It was discovered afterwards, by the united testimony of a number of little negro boys that his punishment was more than just.

But now before entering into any speculation about the matter I propose to intance another remarkable case, which may serve as something parallel to the ones related, but which occurred a short time before the war. It was in the city of Mobile. The individual was one of the most eminently learned, at that day, of the clerical profession, and was at the time of his conviction engaged upon a voluminous work upon the geological and archeological discoveries in Egypt; wherefrom he had but lately returned, with a largely accumulated material which was to be embodied in his work. He was advanced in years, had a highly respectable family, with two sons eminent in the profession of medicine and law. But to make a long story, if fully detailed, short, he was charged and found guilty of intrigues with young men of his church. His guilt was so palpable he did not wait upon the order of his going, but left incontinently, and we believe has never been heard from since. It was thought that he had contracted the custom in Egypt, or wished to revive the ancient Roman custom, which at one time caused the youthful male of the Eternal city to be equally in demand to the lascivious creature of his own sex, as was the female to those who followed the natural dictates of legitimate passion.

Now what must be our commentaries? Won't Dr. Kiernan, who seems to be *au fait* on the subject, enlighten us? Misplaced passion—sensation rather. Do individuals like the first two cases mentioned, experience sexual gratification through the genito-labial nerve, as Voltaire calls it? Or is it that the poor wretch's brain is agog, and through some unaccountable reflex chaos everything in his nature is turned topsy turvy? Shame does not seem to be a part of the character of such persons, and in truth they hardly display natural animal "gumption" in concealing their unspeakable acts. Why in the first case stated, the discovery of this untoward habit had not been made long before, is the great wonder, as further developments showed that the boldness of his actions had betrayed to others who had grown to manhood, his shocking inclinations.

In other respects no charge of unsound mind could have been made against these individuals. There was nothing peculiar in their acts which might distinguish them from the common run of mankind, but a fondness for the male youth of the community. It was described in these cases as merely a commendable fondness for children. As I do not now write to teach, but to be taught, I shall not enter further into this matter; but only hope that some one more competent to the task, will favor the LANCET and its many readers with a well-digested resumé upon the neuroses or what-not of this strange affection. It is full of interest to the physician; and how deeply should it be to society at large, as no doubt it prevails more largely than at first thought would seem probable. In its effect upon childhood and youth it must be most damning and destructive to morals, and doubtless its permanent and lasting effects are not the least of its enormity.

Proceedings of Societies.

Detroit Academy of Medicine.

FEBRUARY 12, 1884.

The Academy met at the office of Dr. Yemans, the president occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Connor read an interesting paper on "Loss of Hearing Resulting from Mumps."

DISCUSSION.

Dr. Noyes: In my experience, although I have treated a great many cases of mumps, I cannot recall an instance where the patient became permanently deaf. Physicians have always recognized the danger in this disease, of a metastasis to the brain. It is easy to see how inevitably loss of hearing must follow an acute inflammation of the middle ear, on account of the pressure upon the delicate mechanism of that organ that must arise from even a small amount of exudation. I have had inflammation of the middle ear from diphtheria. I had one case of syphilitic origin, in which permanent deafness resulted. There was suppuration of the mastoid cells, and suppurative inflammation of the middle ear itself.

Dr. Spalding: I had one case of mumps in a married lady, in which there was metastasis to the mammary gland. Her children

had had the mumps, and she took it of them. Two days after the disease manifested itself, the mamma became inflamed, but there was no suppuration.

Dr. Bradley: I have never seen any ear trouble following mumps. The most excruciating case I ever saw of this disease was in a child three years old, who had an incarcerated testicle. This became inflamed, and the little patient suffered very severely, as might be expected. It was necessary to make free use of opiates.

Dr. Connor: It would be interesting to watch a case of parotitis in which the ear became involved, to see whether the inflammatory action extended directly to the ear by contiguity of structures.

EXHIBITION OF APPARATUS, ETC.

Dr. Connor exhibited some instruments for testing the hearing of a patient: Politzer's acumeter, by which a sound of definite intensity may be produced, and Blake's tuning fork.

Dr. Yemans exhibited an instrument for removing superfluous hairs by electrolysis—a needle to be inserted into the root of the hair to destroy the follicle.

Dr. Lyons exhibited specimens of syrup yerba santa, prepared by several different formulas, some with, and one without, the use of alkalies. The remarkable power of the syrup to mask the bitterness of quinine was demonstrated by practical tests. The syrup made without the use of alkalies is of a paler color than the others, somewhat less pronounced in flavor, but its power of destroying the bitterness of quinine seemed to be equal to that of the other samples. The syrup made after the proposed formula of the Detroit Pharmaceutical Society had a perceptible odor and flavor of ammonia, and had deposited a tarry substance on the sides of the bottle. A sample made with carbonate of potassium, 25 grains to the pint, was of a clear, deep red color, free from deposit, and seemed to be all that could be desired in a preparation of this kind. Formula: Fl. ext. yerba santa, 1 fl. oz.; carbonate potassium, 25 grains; water, 7½ fluid ounces; sugar, 14 oz. av. Dissolve the potassium carbonate in the water, and add the fluid extract. Mix thoroughly, and set aside until the fluid is clear. Decant the clear portion of the fluid, and dissolve in it the sugar with the aid of a gentle heat.

VERBAL COMMUNICATIONS.

Dr. Yemans: I have recently had an

interesting case of poisoning by potassium chlorate. The patient was a young man who had been at work in the factory of Parke, Davis & Co., engaged in making lozenges of chlorate of potassium. He was attacked by symptoms resembling those of scarlet fever. He had a high fever, vomiting, became delirious. On the second day a rash appeared, at first erythematous, then somewhat papular. The next day the skin all over the body appeared as if it had been macerated in hot water. You could roll it up in folds. After this it became desiccated and finally it desquamated. The patient lost one eye by extension to the cornea of this affection of the skin.

He confessed having eaten pretty freely the chlorate of potassium lozenges, supposing them quite harmless. In the early part of the attack he had hæmaturia. The mucous membrane of the mouth was also affected.

Dr. Noyes: Is there any account in the books of poisonous effects such as have been described produced by potassium chlorate? The effects, as I have seen them described, are manifested in derangement of the kidneys and stomach.

Dr. Connor: Dr. Jacobi says that he regards the quantities of this drug which are often prescribed, on the authority of the books, as dangerous, and believes that the kidneys are frequently damaged by them.

Dr. Bradley: In 1869 there was a man brought to the Marine Hospital who had been injured at the time the "Guiding Star" was blown up. There were no bruises or cuts on his person, but he had suffered from shock to the nervous system. In three days he developed a rash somewhat similar to that described by Dr. Yemans. He was red as a boiled lobster all over the surface. The next day the whole skin was eczematous, and the patient suffered terribly from pruritus, which was somewhat relieved by liberal applications of cold cream. Afterwards there was desquamation of the cuticle. This patient said that some years before he had met with a similar accident, and had been affected, as a result, in precisely the same way. Apparently the rash resulted from shock to the nervous system.

Adjourned.

Feb. 19, 1884.

The academy met at the office of Dr. Connor. In absence of the president and

vice president, Dr. Chittick was appointed chairman.

VERBAL COMMUNICATIONS.

Dr. S. P. Duffield: I have among my patients a boy six years old, who two or three months ago was brought to me with what was thought to be a rupture. I examined the child, and found that the supposed rupture was an incarcerated testicle. The question arises, what action, if any, should be taken in such a case? I should like to have the views of members of the academy in regard to it.

Dr. Maire: Does it give him any pain?

Dr. Duffield: It seems to fret him at times.

Dr. Maire: I think it is likely to give him trouble as he grows older. I have seen recently an account of two cases of this kind, in adult patients, in which the testicle having become troublesome was extirpated, the operation proving in all respects, successful. In the present instance I think there is nothing to do at present. In case the testicle should prove troublesome it may be best to make an operation, to endeavor to restore it to its place in the abdominal cavity, or to extirpate it.

Dr. G. Duffield: I knew of the case of a man who had what he supposed to be a bubo, and was treating it accordingly with mercurial ointment, the "bubo" being in fact, a testicle, which had not descended.

Dr. S. P. Duffield: What is the cause of the arrest of the testicle in its descent? Is it from the shortness of the cord, or from closing of the canal? If from the latter cause, it might be possible to bring it into its proper place; if from the former, this would be out of the question.

WRITTEN COMMUNICATIONS.

Dr. S. P. Duffield read a paper on the relation of school hygiene to epidemics of diphtheria; urging strongly the importance of perfect ventilation of school houses as a means of preventing the spreading, through the schools, of contagious diseases.

DISCUSSION.

Dr. Maire: This subject, the contagiousness and the etiology of diphtheria, is one of great importance. There is often doubt whether a given case is one of diphtheria or not, the characteristic symptoms of the disease in its typical form, being absent, and yet these mild cases are not infrequently followed in the same family by cases of undoubted

diphtheria—or the two forms appear simultaneously in different members of the same family. I do not regard the cause of diphtheria as a germ but rather as an influence, but there is no question that the disease may be communicated. Epidemics occur most commonly in winter, but, contrary to what we might expect, they are more frequent in rural districts than in cities. One of the conditions for the development of the disease appears to be the presence of a certain amount of moisture—a condition also favorable to the development of fungous growths (mould, etc.). The contagious influence may be spread often by unsuspected agencies. A case of diphtheria occurred in the family of a man who makes his living by copying photographs. There were in the room pictures which were completed and ready for delivery, and these might be the means of carrying into other houses the infection.

The disease is certainly communicated sometimes by direct implantation. Dr. McKenzie cites the instance of a hound which had devoured the fæces of a diphtheritic patient, and which manifested all the symptoms of the disease, including the formation of the false membrane in the throat and fauces.

The sanitary arrangements in our school houses unquestionably are very bad, particularly so in country school houses. The privy often is in close proximity to the school building, and the well whence comes the supply of drinking water is often dangerously near the privy. An epidemic of unusual virulence which occurred in Vermont in 1879, was made a subject of especial investigation, when it was found that the drinking water had been contaminated by the carcass of a dead animal. In this case, also, the school-house was the center to which the contagious influence was traced.

True croup I believe to be identical with laryngeal diphtheria. I have seen cases of diphtheria, the origin of which I could trace to a case of membranous croup. Again I have seen croup follow exposure to diphtheria. As I have already said, I do not think we can draw any distinct line of demarcation between diphtheria, and the milder forms of sore throats which are so prevalent. Some authorities speak of two forms of diphtheria, the one without, the other with, exudation.

Dr. Connor: Beyond question a knowledge of the causes which produce epidemics of diphtheria, and of the means by which

these may be aborted, while it interests us deeply as physicians and scientific investigators, has a still more profound interest to us as men. In Wisconsin the Board of Health has traced the origin of epidemics often to the school house, and the conditions which produce this result in Wisconsin are not wanting in our own somewhat older State.

One proposition I think it is safe to affirm; if there were no suitable soil in which epidemic diseases might thrive, there would be no epidemics. We may do one of two things, either destroy the germs—literal or figurative—of disease, or else remove the soil and so give no opportunity for the germs to develop. There are many individuals who are apparently proof against contagious diseases. They pass through epidemics without suffering even a mild attack of the malady which is fatal to multitudes. Whence this immunity? I believe it is because the individual has such vigor of constitution that disease finds no foothold anywhere in his person. The ground is all preoccupied with so vigorous a growth that no chance seed can spring up thereon. If the organism is developed in accordance with physiological laws, and kept in perfect condition by attention to hygiene rules, there is little to be feared from contagious diseases. I have often occasion to say to parents that their children must be taken out of school. The effect of school life is depressing to the vitality. If there were perfect ventilation in the school houses, and the hygienic conditions and surroundings otherwise were what they should be, the children would not suffer—unless, indeed, as so often happens, they are set at tasks beyond their years. But in the existing state of things, I think children should not go to school before they are eight or nine years of age. If they could be kept out of doors up to that age, they would be far less susceptible to the attacks of epidemic diseases than they are now.

I do not think that we can hope very soon to see school houses ventilated in the perfect manner proposed in the paper, by means of a fan, but there could at least be placed in every crowded room in a school, a grate or fireplace which will do much to secure ventilation. The plan has been adopted in several instances to my knowledge, and has acted admirably.

One thing cannot be too strenuously insisted upon, viz., that there should be

some supervision over our schools apart from that exercised by school teachers and school boards. Teachers do not understand the incalculable harm they often inflict on the tender little ones committed to their charge. They impose burdens on them which only a mature man or woman is capable of bearing, and the children who give the greatest promise are the ones that suffer the most.

The school board resent as an interference with their prerogatives, any action of the health board, or of other officials, but when the people awake to the importance of the subject, and realize what interests are at stake, either school boards will be differently constituted from what they are at present, or else they will not be supreme authority on matters vitally affecting the welfare of the rising generation.

The hour for adjournment having arrived, motion was made that the discussion of this subject be continued at the next meeting of the academy. Carried.

Adjourned.

Feb. 25.

The Academy met at the office of Dr. Andrews, Dr. Bradley presiding.

WRITTEN COMMUNICATIONS.

Dr. Maire read a paper on the etiology of diphtheria, and the means which may be adopted to prevent epidemics of that disease.

Dr. Cleland: The practice of disinfecting houses in which there have been cases of diphtheria, by burning a few grains of sulphur in the room occupied by the patient, seems to me more likely to do harm than good, by inducing a delusive idea of security where, in fact, there is danger. That, I understand, is the method adopted by our health officer. A man goes through the rooms to be disinfected, carrying a shovel, on which sulphur is burning. The whole operation takes usually less than five—possibly ten—minutes.

Dr. Yemans: The official who came to disinfect my house did certainly no more than that. He removed the card, and presumably with that the danger of infection.

Dr. Clark; In the case related by Dr. Maire, it does not seem to me to be proved that it was on account of eating the fæces of the diphtheritic patient that the dog contracted the disease. Might he not have been poisoned by exhalations from the patient, in

the way in which the contagion generally spreads, even if he had not eaten the fæces?

Dr. Maire: Dogs are often exposed, if their presence in the sick room involves exposure, without taking the disease. In the instance given there had been an unusual opportunity for infection, and the animal became infected. It seems logical to connect these two circumstances as cause and effect.

Dr. Wyman: I have never succeeded in causing dogs to take diphtheria. I have not only made them swallow the excretions of diphtheritic patients, but I have injected the the diphtheritic exudate under the mucous membrane of the animal's lips, etc.

Dr. Bradley told of a cat who caught diphtheria from sleeping with a diphtheritic patient.

Dr. Chittick: Several instances are on record, in which cats have taken the disease in the manner alluded to. I have myself seen at least one case.

Dr. Clark: I have tried the calomel treatment with apparent success in three cases of the croupous form of diphtheria. I gave three grains every hour. My previous experience with calomel had not given me a favorable opinion of the remedy, and I do not now use it except in croupous cases.

Dr. Wyman: I have recently read a detailed account of the epidemics of diphtheria which have occurred in Mansfield, O. These are all traced to an importation of the disease in 1823. Within a few years the water supply of the town has been changed by the establishing of water works, but there has not been any distinct connection traced between the disease and the water supply.

Dr. Connor: One may see in the reports of the New York Health Board how in New York City the outbreaks of diphtheria, scarlet fever, etc., follow the lines of the old water courses. The sewerage in these parts of the city is as good as elsewhere, but the houses are built on made ground, and the decaying organic matter distributed through this soil appears to favor the development of zymotic diseases.

Dr. Wyman: By providing sewers for carrying off the water which formerly filtered through the soil, we are perhaps in danger in the cities of having the soil saturated in places with stagnant water charged with decaying organic matter. The attention of sanitarians has been directed to this point, and some are in favor of having separate provision made for carrying off the rain water.

In Mansfield there was no such condition present. There was no crowding together of the houses; there are large vacant spaces between the dwellings, and the conditions would seem to be more than ordinarily favorable, hygienically.

Dr. Clark: The worst epidemic of diphtheria I ever saw occurred in a village in Canada, where I was at the time a student of medicine. The soil was sandy. The village was surrounded by pine forests. The houses were isolated, and scattered over several square miles of territory, but the disease would appear in one family and another, and was of a most violent type. The houses were mostly frame houses, set on posts, and there was nothing out of the way, so far as we could see, in their sanitary surroundings. In Detroit diphtheria does not confine itself to the lower parts of the city. It has been most prevalent and most fatal on the high land in my own immediate vicinity.

Dr. Cleland: The worst epidemic I have known of diphtheria was that of 1839, in Greenfield. Whole families were swept away. The conditions would seem to be such as are conducive to health. There was plenty of fresh air—no scarcity of food, and nothing peculiar in the character of the water supply.

Dr. Connor: I remember a conversation I once had with Dr. Chase, who had practiced sixty years in the country in Vermont. He said that in some places typhoid fever and diphtheria became very prevalent. Many of the houses in that region were very old; had been occupied continuously for 150 or 200 years. There was in these cases a remedy which he said was always effectual; that was to tear down the old houses and build new ones. For some years the inmates of the new houses enjoyed immunity from the diseases named.

Dr. Andrews: The causes of these epidemics are not easy to designate. Much is said about organic matter in a state of decomposition, but this is not in itself a necessary cause of disease. At least the Englishman devours with impunity his gamey meat, and the German his Limberger cheese. Those who live in the midst of filth often escape, while their neighbors, in comfortable houses, apparently free from any possible source of danger from "decomposing organic matter," or even from "sewer gas," are attacked.

Dr. Clark: Some years ago Dr. Burdon Sanderson reported as a result of his observa-

tions that scavengers and others who are compelled to breathe the foul sewer gases, the emanations from decaying animal and vegetable matter, are even above the average in longevity.

Dr. Andrews: I suppose it is that our vitality is lowered by something in our habits of life so that we are more susceptible to the attacks of contagious diseases, and more readily succumb. In the cities of China, where the streets and dwellings are in a horribly filthy condition, typhoid fever and diphtheria are unknown.

Dr. Cleland: It is said that in Pekin they water the streets with the excreta. The only disease that seems to result is ophthalmia, which is very prevalent.

Dr. Connor: In the middle ages the cities of Europe were subject to terribly destructive plagues. This would seem to have a close connection with the total absence of any attempt at cleanliness. The narrow streets were the common receptacle of garbage, excreta, and refuse of every description. Every few years a great epidemic would sweep off all but the most hardy of the population.

Dr. Andrews: Statistics show a wonderful improvement in the sanitary condition of the cities of Europe. It is said that the annual mortality in London two hundred years ago amounted to 250 per 1,000. A hundred years ago it was 150 per 1,000. Now it is reduced to 23.

Adjourned.

MARCH 4, 1884.

The academy met at the residence of Dr. Spalding, Dr. Bradley occupying the chair.

Dr. Spalding read a paper on some points in the management of puerperal patients, with reference especially to the proper mode of applying the binder, and on the causes which lead to show sub-involution post partum.

Discussion.

Dr. Andrews: I think too much stress cannot be laid on the importance of keeping these patients confined to the bed for several weeks after the birth of a child. There is in my experience nothing in which the physician is more often disobeyed, and I am sure that this disobedience results very often in uterine displacements. I have frequently explained carefully to the patient the physiological reasons why this long period of rest is required, but I have found very few, even among the most intelligent of them, who do

not rebel against so long and close a confinement, and I think I do well if I persuade them to keep their beds ten days. I have a few patients, however, who have followed religiously my injunction, which is to remain at least three weeks in bed, and these patients are never troubled with uterine difficulties.

In the matter of bandaging there is perhaps room for difference of opinion. Many physicians, within the past few years, have been prejudiced by their reading or by their instructors, against the use of the binder, but experience has not justified the prejudice, and many indeed who had been biassed in their judgment by their education, found in practice that the binder was of real service.

Of course women themselves have no idea of what a bandage is intended to accomplish. They imagine that all that is needed is a band or belt, around the waist, to prevent the womb from going up into the thorax. Professional nurses, however, generally know how the bandage ought to be applied, and are usually careful to keep it properly in place. The patient herself, after the nurse leaves, is generally careless, and unless the physician gives the matter his personal attention, the bandage is apt to become worse than useless. We cannot lay down an absolute rule about the height to which the bandage shall be allowed to extend. Often, however, in my experience, for the comfort of the patient, it is necessary to carry the bandage considerably higher than the navel.

Dr. Cleland: The subject of the paper is one in which I have an especial interest, both on account of its intrinsic importance, and from my willingness to accept hints from any source on all practical points. It seems to me that we sometimes exaggerate the importance of matters which on serious thought we recognize as trivial.

If it is true that parturition is a natural process, then the trouble and pains we take to avoid the dire consequences of possible accident is unnecessary, and even hurtful. If a bandage were necessary for the parturient woman, nature would have provided one. I myself practice bandaging for a few days, but I have seen cases where the bandage was not applied, which were apparently none the worse for the omission. So also in regard to the necessity of keeping the patient a long time in bed. Among the Indians, among Eastern nations, and even in our own midst among the lower classes, it is customary for a woman to get up immediately after the

birth of a child—to go on indeed with her daily duties as a matter of course, and in such cases no injury appears to follow the indiscretion. But it is not so with those who revel in the luxuries of civilized life. These are in an unnatural condition, and are liable to peculiar diseases and troubles in consequence, and we must adapt our treatment of them to their unnatural conditions.

One interesting question is suggested by the paper. Why is it that, in the case of mothers who do not nurse their infants, involution of the womb is slow? There would seem to be some peculiar sympathy between the several portions of the reproductive system.

Dr. Andrews: The drain upon the system of lactation must have, besides, a powerful derivative influence.

Dr. Connor: May not the fact that one of the chief constituents of the milk is fat, and that the process of involution is largely one of fatty degeneration, throw some light on this subject?

Dr. Gilbert: I certainly regard parturition as a natural process. I do not think, however, that we can rely upon that word nature.

The natural condition of a civilized woman is very different from that of a savage. Call it an artificial condition if you like, but the civilized individual requires a great many helps which the savage does not need. This is so obvious that it is needless to expand the idea. The comforts with which we surround ourselves become soon necessities of our existence, and the luxuries of one generation are the common conveniences of the next.

I have always applied the bandage; the material may be linen or cotton, but the mode of application is important. It should be applied from below upwards, and I generally carry it higher than the navel. In strong women, muscular tonicity may accomplish, perhaps, what we seek to do artificially by the bandage.

The recumbent position, like the bandage, is a means of accomplishing a definite object.

I take account of the condition of the patient; make no arbitrary rule. One thing, however, I insist upon viz., that the patient shall not see any visitors. The woman should not sit up until the lochial discharge has nearly ceased. By that time we may consider that the womb is so far restored to

its normal condition as to permit the patient to get up.

That there is an intimate nervous connection between the breasts and the womb, is shown by the fact often observed that when the new-born child is put to the breast, firm contraction of the uterus takes place.

I do not agree with the author of the paper in the idea that massage is necessary to bring the milk. Where excitation is desirable it may do good—not surely when there is already tendency to congestion. When abscess is threatened, I employ saline cathartics, with antimony, following the recommendations of Churchill. The same principle should guide us as in threatened abscess elsewhere.

Dr. Connor: On the practical points of this discussion I have nothing in particular to say, but in regard to the connection of lactation with involution of the uterus, I would like to add a few suggestions. During pregnancy there is developed, not only a large amount of muscular tissue and an extensive vascular system, but a complete organization of nerve tissue with a vast number of ganglionic nerve cells. When the child is born there is atrophy of all this tissue. If the woman nurse her child, there is occasion for the development at a new point of nerve tissue, and the energy of the system may expend itself in a channel which favors rather than interferes with this atrophy. Otherwise we should not be surprised if some of the surplus energy for which there is no longer any demand should continue to expend itself in the system of nerves and nerve ganglia which remain without function, and so act as a disturbing element.

Dr. Goodell, some years ago, when he took charge of the Preston House, introduced new practices among the patients. They were to be allowed to get up very soon after confinement—were not to be encumbered with bandages, etc. The doctor made himself a great reputation, but statistics have shown that the results of his practice have not been good, and physicians are returning to the old “unnatural” practices.

Dr. Noyes: In discussing this question we must remember that we have to deal with women in an enfeebled condition. A woman in a state of robust health, accustomed to all manner of hardships, will bear children as easily as she will perform certain other functions of nature. I have myself seen women among the laboring population of whom this

was literally true. The patients go about their usual work the very day their child is born. But with ladies, we all know this is not the case. I enjoin at least 10 days—possibly 15, of recumbency. I apply the bandage reaching up to the ribs; otherwise it will sometimes get rolled down to the hips.

Nursing is important, I think, not only for its physical, but for its moral effects. Womanhood culminates in the experience of nursing an infant, so woman themselves have assured me.

Another point in the care of the lying-in woman which I regard of great importance is watching the condition of the bladder. This cannot be trusted to the nurse. See to it that the bladder be not permitted to become over-distended.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

JUDSON BRADLEY, M. D.,
President.

Michigan State Board of Health.

[Reported for the DETROIT LANCET.]

The regular quarterly meeting of the Michigan State Board of Health was held in the office of the Board at Lansing, Mich., July 8, 1884, the following members being present: John Avery, M. D., of Greenville, President; C. V. Tyler, M. D., of Bay City; Henry F. Lyster, M. D., of Detroit; J. H. Kellogg, M. D., of Battle Creek; Victor C. Vaughan, M. D., of Ann Arbor; Arthur Hazlewood, M. D., of Grand Rapids; and Henry B. Baker, M. D., Secretary.

The Committee on Examination of textbooks on Physiology and Hygiene, with special reference to alcohol and other narcotics, reported, after which the following resolution was adopted:

Resolved—That while we cannot recommend without qualification any of the books presented to this Board for examination, with the exception of those already acted upon, on account of numerous and important errors and omissions, the following works seem to us to be admissible for use in the schools, although we consider it important that the errors referred to should be eliminated as speedily as possible; and that without such correction none of the works named can receive the entire approval of this Board:

1. Physiology and Hygiene. By J. C. Hutchinson, M. D., LL. D. New York:

Clark & Maynard, publishers. Edition of 1884, with supplement on Stimulants and Narcotics.

2. *The Laws of Health: Physiology, Hygiene, Stimulants, Narcotics.* By J. C. Hutchinson, M. D., LL. D. New York: Clark & Maynard, publishers.

3. *Hygienic Physiology, with special reference to the use of Alcoholic Drinks and Narcotics.* By J. C. Steele, Ph. D. A. S. Barnes & Co., publishers, New York and Chicago.

4. *Lessons on the Human Body: An Elementary Treatise upon Physiology, Hygiene, and the effects of Stimulants and Narcotics on the Human System.* By Oustes M. Brands. Leach, Shewell & Sanborn, publishers, Boston and New York.

5. *First Lessons in Physiology and Hygiene, with special reference to Alcohol, Tobacco, and other Narcotics.* By Chas. K. Mills, A. M., M. D. Philadelphia: Eldredge & Brother, publishers. 1884.

6. *Elements of Physiology and Hygiene.* By R. T. Brown, M. D. VanAntwerp, Bragg & Co., Cincinnati and New York.

7. *The Eclectic Physiology for use in Schools.* By Eli F. Brown, M. D. VanAntwerp, Bragg & Co., publishers, Cincinnati and New York.

The Secretary presented a report on four outbreaks of cheese poisoning in Michigan, during May and June, namely, at Middleville, Barry Co.; Jerome and Jonesville, Hillsdale Co.; and Big Rapids, Mecosta Co. All persons who eat of the cheese were taken sick (in all about one hundred and sixty-four persons) with the same symptoms, *i. e.*, pain and burning sensation in stomach, intense vomiting and purging, feeble pulse, cold extremities, and tendency to collapse. All finally recovered. The cheeses were ordinarily good-looking samples, but when cut or broken, a liquid oozed into the pores. In each case the cheese was made at the factory of G. B. Horton, Fruitridge, Lenawee Co., Mich.

Dr. V. C. Vaughan, Committee on Foods, also read a report on cheese poisoning. At the request of the Secretary, he had visited the factory in Fruitridge, and had analyzed specimens of the cheese. Everything about the factory appeared to be scrupulously clean, and nothing in vats, cans, or surroundings offered any explanation of the cause of the poisoning. Analysis showed no arsenic, copper, lead, iron, or other mineral poison. When the cheese was cut or broken, a whitish

liquid oozed into the pores, and in this liquid microscopic organisms were detected. The liquid was very strongly acid. For more than a hundred years the attention of the scientific world has been drawn to the subject of cheese poisoning by repeated outbreaks of this sort in this country and in Europe. Much has been written on the subject, and many investigations carried on, especially in Germany. It has been variously ascribed to diseased milk, decomposition, and the development of certain fatty acids, etc., but we do not yet know what makes the cheese poisonous. The manufacturer said the cheese which produced the ill results was all made between April 26 and May 26, 1884. It was made in the same manner and with the same care as other lots which had given no cause for complaint. Good cheese is only very slightly acid, and slowly reddens blue litmus paper. The poisonous cheese was intensely acid, instantaneously reddening blue litmus when the paper was applied to the freshly-cut surface. This test for poisonous cheese appears to be practicable. The blue litmus paper could be applied by any grocer to each freshly-cut cheese. If the litmus paper is instantly turned red by the liquid which oozes into the pores, the cheese is to be suspected as poisonous. Dr. Vaughan's report will be published in the next annual report of this Board.

The Secretary reported that small-pox was brought into Rose Lake township, Osceola Co., Mich., June 9, 1884, by a German immigrant, who, with wife and three children, landed in New York, June 4, by steamer "Weser," "Weiser," or "Wieser." The immigrant says that on the passage over there were three deaths on that vessel from small-pox, and several cases that recovered. The immigrant was taken sick June 13, and was attended by Dr. Bettes, of Le Roy village, in the adjoining township of Le Roy, who could not know the true nature of the disease till the eruption took place; soon after which Dr. Bettes himself came down with the disease, and has since died. The health authorities of Le Roy village had neglected to appoint a health officer as the law requires, because they thought they would "save a health officer's salary by doing without one." Dr. W. J. Law was then appointed health officer, and he seems to have done very efficient work, as did also Mr. Bryan Monaghan, health officer, Rose Lake township. The townships of Rose Lake and Le Roy united in the construction of two hospitals, which were built June 29. At last report there were

ten cases in the hospitals, five cases at Tustin and one at Cadillac.

This outbreak is another illustration of how Michigan and the Northwest suffer from the lack of a careful immigrant inspection service, such as was planned by the National Board of Health, and for a time carried on, but discontinued for want of an appropriation.

The chairman of the special committee appointed to examine the sanitary condition of Washtenaw and Jackson county Jails, read their reports which were ordered published in the Annual Report of the Board for 1884.

Owing to the spread of Asiatic cholera in Europe, and the liability of its introduction into this country at anytime, it was decided to issue circulars to local boards of health on the prevention and restriction of cholera.

The third edition of 30,000 copies of the document on the Restriction and Prevention of Diphtheria, being nearly exhausted, it was decided to revise it and issue a fourth edition, of not to exceed 25,000 copies, for general gratuitous distribution in Michigan.

The work of the office in compiling reports of sickness, meteorology, and of proof-reading, correspondence, etc., has continued as heretofore.

A compilation of the Public Health Laws of Michigan has been printed, and is nearly ready for distribution.

The document on Restriction and Prevention of Scarlet Fever has been revised and 20,000 copies printed for gratuitous distribution. Proof on most of the Annual Report has been read, and it is now printed up to page 224.

A second demand for the return of names and addresses of health officers has been made on delinquent townships, cities, and villages. Addresses of about 1,050 health officers have been received and recorded. As fast as addresses of health officers for 1884 are received, there are sent to each such officer enough copies of the revised circular on the work of health officers and local boards, to supply each member of the board with a copy. Documents on the Restriction and Prevention of Contagious Diseases are sent with this circular, and a blank for notification to this office of an outbreak of a dangerous communicable disease. During the quarter about 120 letters and 8,000 documents have been sent to local health officers where contagious diseases have been reported present, the documents being for general distribution among the neighbors, who it is believed will

be more likely to read them carefully at such times.

The next regular meeting of this Board will occur October 7, 1884, instead of the second Tuesday in October, which would be its regular time.

Health in Michigan.

For the week ending April 19, 1884, the reports indicate that inflammation of the brain, pneumonia, and erysipelas increased, and that remittent fever, diarrhea, and intermittent fever decreased in area of prevalence.

At the State Capitol the prevailing winds, during the week ending April 19, were south-east; and, compared with the preceding week the temperature was considerably higher, the absolute and relative humidity were more, and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was present during the week ending April 19, and since, at 8 places, namely, at Armada, Big Rapids, Calumet, Detroit, East Saginaw, Grand Rapids, Leslie, and Pontiac; scarlet fever at 23 places: Adrian, Algonac, Battle Creek, Big Rapids, Detroit, East Saginaw, Fenton, Grand Rapids, Hersey, Jerome, Kalamazoo, Mason, Mecosta, Moscow, Northville, Nottawa, North Star, Otsego, Pavilion, Roxana, Saginaw, Sherwood, and Union City; measles at 7 places: Ann Arbor, Detroit, Grand Rapids, Lansing, Mason, Mendon, Sand Beach.

For the week ending April 26, 1884, the reports indicate that remittent fever considerably increased, that diarrhea, dysentery, measles, and whooping-cough increased, and that pneumonia, scarlet fever, cerebro-spinal meningitis and inflammation of the kidney decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending April 26, were north-east; and, compared with the preceding week, the temperature was higher, the absolute humidity was less, and the relative humidity and the day and the night ozone were considerably less.

Including reports by regular observers and others, diphtheria was reported present during the week ending April 26, and since, at 4 places, namely: Detroit, Grand Rapids, Linden, St. Clair; scarlet fever at 12 places, Algonac, Armada, Berlin, Coldwater, Detroit, East Saginaw, Mason, North Star, Otsego, Plainwell, Saginaw, St. Clair; measles at 8 places, Detroit, Grand Rapids, Holly,

Jerome, Lansing, Mason, Mendon, Thornville.

For the week ending May 3, 1884, the reports indicate that the remittent fever and erysipelas increased, and that bronchitis, diarrhea and inflammation of brain decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending May 3, were westerly; and compared with the preceding week the temperature was higher, the absolute and the relative humidity and the day and the night ozone more.

For the month of April, 1884, compared with the average for the corresponding months for the six years, 1879-1884, the temperature was slightly lower, the absolute humidity, and the day and the night ozone less, and the relative humidity the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending May 3, and since, at 8 places, namely: Calumet, Detroit, Grand Rapids, Holly, Linden, Port Huron, Pontiac, and West Bay City; scarlet fever at 11 places, Almont, Detroit, Grand Rapids, Hazelton, Kalamazoo, Ogden, Orleans, Port Huron, Plainwell, Sand Beach, and West Bay City; measles at 7 places, Detroit, Grand Rapids, Holly, Mendon, Maple Rapids, North Adams, and Thornville. Small-pox was reported at Detroit May 3, 1884.

For the week ending May 10, 1884, the reports indicate that consumption, diarrhea, bronchitis, and scarlet fever increased, and that influenza decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending May 10, were northeast; and, compared with the preceding week the temperature was slightly higher, the day and the night ozone more, and the absolute and relative humidity considerably more.

Including reports by regular observers and others, diphtheria was reported present during the week ending May 10, and since, at 16 places, namely: Albion, Calumet, Corunna, Detroit, Dowagiac, East Saginaw, Farmington, Hastings, Kalamazoo, Linden, Ludington, Pontiac, Port Huron, Roland, Texas, West Bay City; Scarlet fever at 23 places, Armada, Almont, Cadillac, Calumet, Detroit, Dowagiac, East Saginaw, Grand Rapids, Greenville, Hazelton, Hillsdale, Kalamazoo, Ludington, Muskegon, North Star, Orleans, Pontiac, Port Huron, Richmond, Sand Beach, Vevay, West Bay City; measles at 11 places, Armada, Ann Arbor, Detroit, East Saginaw,

Greenville, Grand Rapids, Hillsdale, Holly, Mendon, North Adams, Thornville. One case of small-pox at Detroit, convalescent.

For the week ending May 17, 1884, the reports indicate that influenza, tonsillitis, and consumption increased, and that whooping-cough, diarrhoea, and rheumatism decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending May 17, were west; and, compared with the preceding week, the temperature was lower, the absolute humidity and the day and the night ozone less, and the relative humidity considerably less.

Including reports by regular observers and others, diphtheria was reported present during the week ending May 17, and since, at 15 places, namely, Armada, Detroit, Grand Rapids, Lansing, Ludington, Lake township, Linden, Mecosta, Owosso, Port Huron, Pontiac, Portage, Sault Ste. Marie, Sutton's Bay, and Texas. Scarlet fever at 14 places, Albion, Almont, Armada, Berlin, Detroit, Grand Rapids, East Saginaw, Howard City, Marshall, Muskegon, Orleans, Port Huron, Pontiac, West Bay City. Measles at 11 places, Albion, Armada, Cedar Springs, Detroit, East Saginaw, Grand Rapids, Marshall, Mendon, North Adams, Petersburg, Wyandotte. Small-pox was reported at Detroit May 17.

For the week ending May 24, 1884, the reports indicate that diarrhoea, whooping-cough, and bronchitis increased, and that influenza and tonsillitis decreased in area of prevalence.

At the State Capitol, the prevailing winds during the week ending May 24 were southwest; and, compared with the preceding week, the temperature was considerably higher, the absolute and the relative humidity considerably more, the night ozone more, and the day ozone the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending May 24, and since, at 14 places, namely, Armada, Brockway, Calumet, Detroit, Fenton, Grand Rapids, Holly, Kalamazoo, Linden, Maple Rapids, Pontiac, Portage, Texas, West Bay City. Scarlet fever at 20 places, Almont, Armada, Adrian, Berlin, Calumet, Clay, Columbiaville, Coldwater, Detroit, Emerson, East Saginaw, Grand Rapids, Kalamazoo, Marshall, Muskegon, Richmond, Vicksburg, West Bay City, Winfield, Ypsilanti. Measles at 10 places, Adrian, Brockway, Detroit, Cedar Springs, Grand Rapids, Marshall, Mendon, Maple Rapids, Thornville, Ypsilanti.

For the week ending May 31, 1884, the reports indicate that bronchitis, intermittent fever, inflammation of kidney, consumption, and diphtheria decreased in area of prevalence.

At the State Capitol, the prevailing winds during the week ending May 31 were northeast, and compared with the preceding week, the temperature was considerably lower, the absolute and the relative humidity, and the day and the night ozone less.

Compared with the average for the month of May in the preceding six years, intermittent fever, remittent fever, pneumonia, and tonsillitis were less prevalent in May, 1884.

For the month of May, 1884, compared with the average for the corresponding months in the preceding six years, 1879-1884, the temperature was slightly lower, the absolute humidity and the day and the night ozone less, and the relative humidity slightly more.

Including reports by regular observers and others, diphtheria was reported present during the week ending May 31, and since, at 10 places, namely, Armada, Detroit, East Saginaw, Flint, Manistee, Maple Rapids, Pontiac, Reynolds, Sand Beach, Texas. Scarlet fever at 17 places, Almont, Armada, Columbiaville, Coldwater, Clay, Detroit, Dansville, Dowagiac, Highland, Jennings, Lake, Marshall, Quincy, Roxand, Sand Beach, Vicksburg, and Ypsilanti. Measles at 8 places, Albion, Adrian, Detroit, Grand Rapids, Jerome, Marshall, Muskegon, Thornville.

For the week ending June 7, 1884, the reports indicate that cholera morbus considerably increased, that diphtheria, cholera infantum, and diarrhoea increased, and that dysentery and pneumonia decreased.

At the State Capitol, the prevailing winds during the week ending June 7 were southwest; and, compared with the preceding week, the temperature was considerably higher, the absolute and the relative humidity and the day ozone considerably more, and the night ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending June 7, and since, at 14 places, namely, Calumet, Dansville, Detroit, East Saginaw, Fenton, Grand Rapids, Maple Rapids, Monroe, Muskegon, Port Huron, Pontiac, Republic, Reynolds, and West Bay City. Scarlet fever at 17 places, Cadillac, Calumet, Clay, Detroit, Grand Rapids, Highland, Jennings, Marshall, Muskegon, St. Johns, Sunfield, Traverse City, and Vicks-

burg. Measles at 10 places, Adrian, Charlotte, Detroit, Gaines, Grand Rapids, Jerome, Marshall, Mendon, Midland, and Muskegon.

For the week ending June 14, 1884, the reports indicate that remittent fever increased, and that tonsillitis, cholera morbus, and influenza decreased in area of prevalence.

At the State Capitol, the prevailing winds during the week ending June 14 were northeast; and, compared with the preceding week, the temperature was lower, the absolute humidity and the day and the night ozone less, and the relative humidity the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending June 14, and since, at 12 places, namely, Calumet, Charlotte, Detroit, East Saginaw, Evart, Fenton, Grand Rapids, Linden, Manistee, Maple Rapids, Niles, Pontiac. Scarlet fever at 10 places, Calumet, Detroit, Grand Rapids, Lake, Manistee, Muskegon, Otsego, Pontiac, Sand Beach, Vicksburg. Measles at 8 places, Detroit, Grand Rapids, Greenville, Kalamazoo, Marshall, Mendon, Niles, Ypsilanti. Small-pox was reported at Rose Lake, Osceola Co., June 14.

For the week ending June 21, 1884, the reports indicate that cholera morbus, bronchitis, inflammation of kidney, tonsillitis and whooping-cough increased, and intermittent fever and remittent fever decreased in area of prevalence.

At the State capital, the prevailing winds during the week ending June 21, were southwest; and compared with the preceding week the temperature was higher, the relative and the absolute humidity, and the day ozone, considerably more, and the night ozone slightly less.

Including reports by regular observers and others, diphtheria was reported present during the week ending June 21, and since, at 8 places, namely, Alamo, Cadillac, Detroit, East Saginaw, Linden, Maple Rapids, Niles, Port Huron. Scarlet fever at 12 places, Cadillac, Detroit, Ludington, Manistee, Mason, Rose Lake, St. John, Sheridan, Thornville, Whitehall, Ypsilanti, Vicksburg. Measles at 10 places, Adrian, Detroit, Grand Rapids, Kalamazoo, Mason, Mendon, Marshall, Niles, Sand Lake, Ypsilanti. Small pox at Rose Lake, June 20.

For the week ending June 28, 1884, the reports indicate that intermittent fever, neuralgia, bronchitis, and remittent fever increased, and that inflammation of kidney, measles, scarlet fever decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending June 28, were northeast; and compared with the preceding week, the temperature was lower, the absolute and the relative humidity less, the night ozone more, and the day ozone the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending June 28, and since, at 9 places, namely, Cadillac, Detroit, East Saginaw, Grand Rapids, Holly, Maple Rapids, Pontiac, Port Huron, and Pinconing. Scarlet fever at nine places, Detroit, LeRoy, Manistee, Muskegon, Marcellus, Pontiac, Sand Beach, Thornville, and Vicksburg. Measles 6 places, Adrian, Detroit, Greenville, Grand Rapids, Marshall, and Wyandotte. Eight cases of small-pox in Le Roy Lake, and five cases in Burdell, townships, Osceola County, July 2.

For the week ending July 5, 1884, the reports indicate that diarrhoea, cholera morbus, whooping-cough, erysipelas, and inflammation of bowels increased, and that bronchitis, tonsillitis, and puerperal fever decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending July 5, were west; and compared with the preceding week, the temperature was higher, the absolute humidity and the day ozone slightly less, the relative humidity considerably less, and the night ozone more.

Compared with the average for the month of June in the six years, 1877-1882, cholera morbus was more prevalent, pneumonia and measles less prevalent, and intermittent fever and remittent fever considerably less prevalent in June 1884.

For the month of June, 1884, compared with the average of corresponding months for the six years, 1879-1884, the temperature was higher, the absolute humidity slightly more, the relative humidity the same, and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was reported present during the week ending July 5, and since, at 11 places, namely, Au Sable, Detroit, Essex, East Saginaw, Grand Rapids, Maple Rapids, Monroe, North Shade, Port Huron, Port Crescent, Rose Lake. Scarlet fever at 11 places, Au Sable, Adrian, Brady, Coldwater, Detroit, Grand Rapids, Marcellus, Richmond, Romeo, Rose Lake, Sand Beach. Measles at 7 places, Cadillac, Detroit, Kalamazoo, Marshall, Mason, Otsego, Ypsilanti. Small-pox

in Burdell township (five cases), July 2; Rose Lake township (ten cases), July 5; Cadillac (one case), July 8.

For the week ending July 12, 1884, the reports indicate that influenza, dysentery, and bronchitis increased, and that diarrhoea, inflammation of brain, measles, and whooping-cough decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending July 12, were west; and compared with the preceding week the temperature was lower, the absolute humidity and the night ozone less, and the relative humidity and the day ozone the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending July 12, and since, at 9 places, namely, Charlevoix, Detroit, Dundee, Essex, Grand Rapids, Lansing, Mendon, North Shade, Port Crescent. Scarlet fever at 7 places, Detroit, Dowagiac, Grand Rapids, Lakeview, Marshall, Richmond, Rose Lake. Measles at 3 places, Adrian, Detroit, Grand Rapids, and small-pox at three places, Cadillac, Rose Lake, and Burdell.

HENRY B. BAKER,

Secretary.

LANSING, July 16, 1884.

The Detroit Taucet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Michigan State Board of Health's Circular on Cholera.

This document was issued early in July, as soon as it became evident that there was real danger that cholera would prevail in Michigan.

First it calls attention to the proper directions of effort. As cholera does not arise in this state, effort should be directed (1) to keep it out of the state, and (2) to destroy all the materials in the state by which it could be intestified when once introduced.

It shows that since the National Board of Health has been crippled by the Marine Hospital Service, all who have any authority to act in keeping out the disease are in local boards of health. The health officer of each board should keep all emigrants under careful observation. What is positively known of the cause of the disease is clearly given. The necessity of keeping the stomach digestion good is shown from the fact that the acid so-

lution of a healthy stomach is certain to destroy the cholera poison. To restrict cholera it is shown that all which comes from a cholera patient should at once be either destroyed or thoroughly disinfected. The means for accomplishing this end are plainly given, so that any intelligent person can easily follow them. Farther simple directions are given for the care of those sick with cholera. Lastly, the legal duties of householders and physicians are pointed out. All this information is presented on a four-paged octavo sheet. It should be in the hands of every person in the land. To have some clear definite knowledge of the disease will help all well-disposed persons, both to protect themselves and others against its invasion. Besides perfect protection can only come from each individual doing his or her part in the work of disinfection. Farther the possession of this knowledge will go far towards preventing that unreasonable fear which usually accompanies all outbreaks of this disease. To have a calm mind in the midst of such a state of affairs is to do much towards preventing the extension of the disease.

But without farther remark we give the entire document, in the hope that our readers will do what they can to have their patrons procure and study this or a similar document. It will be a wholesome lesson in sanitation should cholera not visit America this year:

PREVENTION AND RESTICTION OF CHOLERA.

Document issued by the Michigan State Board of Health, July, 1884.

To the Officers and Members of Local Boards of Health in Michigan:—

GENTLEMEN:—The increase of cholera in certain parts of Europe, the probability that it may be brought to the larger cities of this country, and spread from them, or that by some traveler, immigrant, or returning tourist it may be brought to almost any town in this State even before it appears on the seaboard,*

*In 1871, something like this occurred. Three distinct outbreaks of cholera in widely remote parts of the United States were traced to the unpacking of personal effects of immigrants who had come to New York City on uninfected vessels, exciting no suspicion there that they carried the infection of cholera. Within thirty-six hours after they unpacked their effects, the first cases of the disease occurred. This was at Carthage, Ohio; Crow River, Minnesota, and Yankton, Dakota. Small-pox was recently brought into Wisconsin by German immigrants who came on the steamer *Salier*, landing at Baltimore May 15, reaching Black Creek, Wis., May 19, and taken sick May 21, 1884. Small-pox has also just been introduced into Shelby county, Iowa, in a similar manner, by immigrants who came through Baltimore. Small-pox was recently brought to LeRoy, Michigan, by an immigrant who left Bremen, on steamer *Weiser*, May 22, landed at New York June 4, reached LeRoy June 9, and was taken sick June 8, 1884.

make timely the publication of what seem to be the best means of preventing and restricting the disease.

PROPER DIRECTION OF EFFORTS.

Asiatic cholera is not caused by anything ordinarily in this State or country, therefore efforts for its prevention or restriction should be directed especially toward the prevention of the introduction of that invisible cause of the disease which is produced in and spread by each infected person; and in case the disease shall reach your locality, to the restriction and destruction of that cause with the greatest possible haste and thoroughness. Even now, by cleaning up of filthy places, most communities can be put in better condition to control and destroy the infection of cholera should it be introduced. But when cholera appears something must be done besides cleaning up.

WHO WILL KEEP IT OUT OF YOUR JURISDICTION?

By reason of the tide of immigration, this country is especially liable to the introduction of communicable diseases; and by reason of its exceedingly imperfect support of the National Board of Health, the National Government supplies little or no protection to the public health by means of any system of notification, inspection, disinfection, etc., such as the National Board of Health might be enabled to supply; and inasmuch as all quarantine powers in this State are vested in the local boards of health, it behooves local boards of health to be prompt to act and to continue persistent in action, so far as it is possible, for the prevention of the introduction of cholera.† So little can be hoped for, however, from irregular local quarantines, that every board of health should also be prepared to restrict the disease. Newly-arrived immigrants should be under the surveillance of your health officer.

CAUSES OF THE DISEASE.

Recent microscopical and experimental researches in Egypt and Calcutta, made at the expense of the German government, by Dr. Robert Koch, one of the most successful detectives of disease-causing germs, seem to

†Sections 1708 to 1712 inclusive, and section 1695 of the Compiled Laws of Mich., 1871, give local boards of health authority in certain manner to inspect and restrain travelers, remove infected persons, and take possession of and disinfect baggage, goods, premises, and to make regulations respecting articles capable of conveying infection. Sections 1706 and 1707 require the board of health to "make effectual provisions" for the safety of the inhabitants whenever a disease which endangers the public health shall occur within its jurisdiction.

demonstrate, what general observation of the disease had already indicated, that Asiatic cholera is caused by the growth and reproduction in the body of innumerable bacilli or one-celled plants of a kind peculiar to this disease, invisible to the naked eye; that these bacilli may enter the body by the air inhaled, but are far more likely to enter by food or drink taken into the stomach; that they are present in the excreta of a person sick with cholera, and in his clothing soiled thereby, and may be on almost everything that comes into contact with his body.

PREPARATIONS TO RESIST CHOLERA.

There is probably nothing in Michigan from which cholera germs can be developed; but there are many places in which they might thrive and reproduce when once introduced from abroad.

The investigations by Dr. Koch show that the bacillus of cholera can live and reproduce its kind indefinitely in certain, but not in all substances outside the body, namely, in certain alkaline but not in acid solutions; and as the normal condition of the stomach is acid, that it cannot live in the human stomach in its normal condition. The intestinal juices being normally alkaline, the bacillus can, probably, reproduce itself therein without limit whenever it can pass through the stomach. This makes it of especial importance that in times of danger from cholera, the stomach should be kept in its naturally good condition.

Because of the possibility that the cholera bacillus may find lodgment and multiply in various kinds of moist filth, it is important that everything about the house, cellars, barns, premises, alleys and streets, should be cleaned up and kept dry, and as clean as possible, and that there should be a general disinfection of all places liable to become infected. Especially should privy-vaults, sewers, cess-pools, drains, and similar places, be thoroughly and often disinfected with a strong solution of copperas, which may be made acid by the addition of sulphuric acid. The cholera bacilli are said to thrive in nutritive alkaline solutions, and the contents of most privy-vaults are alkaline; hence the importance of such thorough and frequent disinfection as shall kill any of the germs which may find lodgment there.

RESTRICTION OF CHOLERA.

One of the chief means of restricting cholera is to disinfect immediately and thoroughly

all the discharges from those sick with cholera, or with the premonitory diarrhoea, and to disinfect or burn completely all their cast-off clothing, bedding, etc.

The fecal discharges are not as infectious when first voided as they soon become, hence the importance of immediate disinfection. Thrown without disinfection into a privy-vault, cess-pool, or sewer, the fluids vomited, and especially the discharges from the bowels of a cholera patient may soon infect all its contents, and render it a source of infection to those who approach.*

All the discharges from the body,—the vomit, the discharges from the bowels, etc., should be received into vessels containing some concentrated disinfectant, such as chloride of zinc, copperas, or sulphate of zinc, to which may be added sulphuric or other mineral acid.

Clothing soiled by a cholera patient, if laid aside and allowed*to remain moist, soon becomes especially dangerous. It is, therefore, important that all such articles be immediately burned or placed in a strong disinfecting solution until such time as they can be burned, or boiled, washed, and dried. (Dr. Koch's experiments indicate that the bacilli of cholera are destroyed by being thoroughly dried for three hours or more.)

The diarrhoea preceding cholera is frequently painless, and there is, therefore, during the occurrence of cholera, great danger of cholera being spread by the discharges of persons yet able to travel about.† During the first stages of cholera, and especially during the initiatory diarrhoea, prompt medical treatment is important and useful, both for the benefit of the individual and as a means of checking the spread of the disease.

It has been a practice in England, and should be the practice everywhere, when a man is found sick with cholera, to learn by inquiry what privies he has visited, and at once send an officer on the back track to disinfect them. For reasons just stated, notice should at once be sent to the board of health of a locality from which a case of cholera has come.

*In 1773, a colored boy went to Columbia. Ky., from Lebanon, Ky., where the county fair had been held, and where cholera was then present. He suffered from diarrhoea, and used a privy which was large and full, but from which no sickness had previously been traced. He was found in a state of collapse, and died in the stable. Nearly every person who entered that privy within a few days thereafter was taken sick with cholera. Farmers who came in from the country and only visited it once were stricken with cholera. The privy was disinfected, after which no cases were traced to it.

†See footnote on opposite page.

Great care should be had to prevent the contamination of the water-supply by choleraic discharges, as by drainage into wells, springs, or other water-supply, from a privy-vault, sewer, drain, or cemetery. The use of water from a source liable to be infected with cholera excreta should be promptly stopped.

Bodies of those dead from cholera should be wrapped in a cloth wet with a zinc solution, and at once buried; the zinc solution to be made in proportions as follows: Water, one gallon; sulphate of zinc, eight ounces; common salt, four ounces.

DISINFECTION OF CLOTHING, ROOMS, ETC.

It is best to burn all articles which have been soiled by a person sick with cholera. In the glowing fire of a large furnace is a good place to burn clothing. Great care should be taken to burn quickly and thoroughly whatever is burned, and not simply warm up and spread the infection.

Articles too valuable to be destroyed should be exposed for one hour to a dry heat of from 240° F. to 250° F., or three hours at a temperature of 150° F., or be treated as follows:

Cotton, linen, flannels, blankets, etc., should be treated with the boiling hot solution (one-half of the strength of that mentioned in the preceding paragraph), introducing them piece by piece, securing thorough wetting and boiling for at least half an hour. Heavy woolen clothing, silks, stuffed bed-covers, beds, and other articles which cannot be treated with the zinc solution, should be hung in the room during fumigation, pockets being turned inside out, and the whole garment being thoroughly exposed. Afterward they should be hung in the open air, beaten, and shaken. Carpets are best fumigated on the floor, but should afterward be removed to the open air and thoroughly beaten. In no case should the thorough disinfection of clothing, bedding, etc., be omitted.

After a death or recovery from cholera, the room in which there has been a case of cholera, whether fatal or not, should, with all its contents, be thoroughly disinfected by exposure for several hours to strong fumes of burning sulphur, and then it should for several hours, if possible for days, be exposed to currents of fresh air.

Because of the innumerable ways in which the infection may be scattered about the house and premises where there has been a case of cholera, the entire house and out-buildings, including cellar, wood-shed, and privy, may well be disinfected.

Rooms to be disinfected must be vacated. For a room about ten feet square, at least two pounds of sulphur should be used; for larger rooms, proportionately increased quantities, at the rate of two pounds for each 1000 cubic feet of air-space.

Close the rooms as tight as possible, place the sulphur in iron pans which will not leak, supported on bricks or upon a sheet of zinc, set the sulphur on fire by hot coals or with the aid of a spoonful of alcohol lighted by a match. Be careful not to breathe the fumes of the burning sulphur, and when certain the sulphur is burning well, leave the room, close the door, and allow the room to be closed for twenty-four hours.

Privies, cess-pools, drains, water-closets, sewers, gutters, etc., should be frequently and liberally treated with copperas solution made in the proportion of one and one-half pounds of copperas to one gallon of water.

CARE OF THOSE SICK WITH CHOLERA.

The law (section 1706, Compiled Law of 1872) requires the local board of health to provide nurses, if necessary. There is no excuse for failure to care for those sick with cholera. They are less dangerous to the community if well cared for than if neglected. A careful nurse will frequently wash the hands in a disinfecting solution, and always avoid taking into his body with his breath, food, or drink, any dust or fluid contaminated with any of the excreta from one sick with cholera. Neither food nor drink should be taken by the nurse while in the room with a person sick with cholera. If there is possibility of the infection of the water, it should be boiled before it is drunk. By proper attention to cleanliness, ventilation, disinfection of discharges, and of whatever has been in contact with the sick, and by taking proper care as regards kind of food, regular eating, rest, and sleep, and especially against taking the specific cause into the body, with his breath, food, or drink, a person in good health may nurse a cholera patient with a reasonable expectation of escaping the disease.*

LEGAL DUTIES,—PROMPT NOTICES OF OUT-BREAK.

The duty of householders and of physicians to give the local board of health prompt

* "That cholera patients are not dangerous to their attendants has been proved in this epidemic in the Military Hospital, where not a single attendant has suffered from the slightest choleraic diarrhoea."—Port's report to Cholera Commr. for the German Empire, on the Epidemic of 1873-4 in the Garrison of Munich.

notice of the first and of every case of a disease dangerous to the public health; and of the board of health and the health officer to take prompt measures for the restriction of the disease, have been so fully and so often set forth in circulars from the State Board of Health that they need not be repeated here in connection with so dangerous a disease as is cholera.

Notice should at once be sent, on the first appearance of cholera, to the Secretary of the State Board of Health, Lansing, Mich.

After reading this document carefully, please preserve it. A copy may be obtained of the State Board of Health, Lansing, Mich.

Dewey on the Cause and Cure of Quackery.

Dr. G. M. Dewey read a paper before the late meeting of the Missouri State Medical Society, upon the above topic. It is only a repetition of facts presented in addresses of similar character delivered with great regularity before the same society at its annual meetings. It conclusively proves that the conscience of the profession in that State is still alive. While this lives there is hope that the evils complained of will be eradicated. Some are disposed to object to the more or less constant criticism of existing affairs in the medical profession. For ourselves, we hail it as the promise of final relief from the ravages of present evils. Sad will be that day for the medical profession when the voices calling to repentance are hushed into the silence of indifference. But we desire to present the voice of Dewey crying in the wilderness of Missouri.

His first thought as to the cause of quackery is, that it arises from the blind ignorance of the people respecting the nature of life and health, etc. His cure for this is proper education respecting these things. The application of this remedy would undoubtedly squelch the whole matter. Were this done, there would be no occupation for the medical men who lend their names to quack nostrums, quack advertisements under the name of proprietary, or trade mark medicines. Much could be done by the better men in the profession if they would refuse all aid in the study of medicine to the imbeciles who desire to enter their offices. Of course they could go to some one else, as they now go from one college to another, till they find one which will accede to their wishes. Dewey tells us of a student who did this, and at the

third college he got his diploma. When he began practice, he bought a gross of dolls and distributed them among the children, and by this means got into a good practice.

He says that in spite of the fact that all practitioners in Missouri are required to pass through a college course and an examination by a State Board of Health, many of them, with these guarantees in their pockets, are veritable mountebanks. From his own personal observation he gives many illustrations of this statement. Thus he says: "A doctor in my county, who is a graduate of two medical colleges, and has a certificate from the Board of Health, was called to the bedside of a colored woman supposed to be in labor. As the labor lingered, he sent to a neighbor-physician for midwife forceps; but before using the forceps, he concluded he had better see how matters were going. So he returned to town, and got a Sims' speculum. Well, he stayed two days with the woman, and then came home. He said the head of the child was resting on the perineum, so he thought he would give the woman and himself a little rest. He informed me that he considered this a very unique case, for on looking at the os by the speculum, he discovered it would open and shut like a live clam in a shell. He said the child would come down and then suddenly jump back. He asked me what I thought made the baby do that way? I told him probably the child wanted to see if breakfast was ready, or if the doctor had gone, or to see which he would use, the forceps or the speculum."

A considerable number of still worse examples are given of doctors with one or more diplomas and a license from the State of Missouri, of the utter ignorance and incapacity to practice medicine. From all this the doctor concludes: Colleges will not and do not protect the profession from ignorance and incapacity. A State Board of Health does not protect. All that remains is to so educate the laity that they may recognize the real doctor, and employ him to the starvation of the pretender.

This is no new thing to say, but it will bear constant reiteration till it becomes a truth, living in the minds and hearts of the entire reputable medical profession, and the laity as well.

A French chemist has been fined twenty-four hundred dollars for selling morphine so long to a woman that she became insane.

First Experience in Practical Obstetrics.

Perhaps there is no branch of medicine less efficiently taught than obstetrics. In America there are practical difficulties in the way of making the student familiar with the process of parturition. Patients are readily obtained who will permit the most careful examination of the eye, the ear, the lungs, the heart, the larynx, and even the genital organs of male and female, by large numbers of medical students. But of obstetrical cases, relatively few are available for clinical instruction. Dr. Reamy, of the Ohio Medical College, has succeeded in obtaining cases which were willing to be delivered in the presence of a large medical class. Some other obstetric teachers have succeeded in getting for their classes a considerable amount of obstetric clinical material. But as a whole, it may be fairly said that graduates of American medical colleges are entirely innocent at time of receiving their diplomas, of any knowledge of practical obstetrics. In the *Pacific Med. Jour.* a writer gives his first experiences. We quote one of these. Shortly after opening his office, he was called to visit a woman living far in the country. As he went in place of an older doctor, all were astonished at his presence. He also wished himself a thousand miles distant when he ascertained that the woman was in confinement. Taking a drink of the whiskey on the table, he drew up his chair near an old Mrs. Mackey, who wore spectacles. He inquired if she were an old "granny lady." She replied that she made pretensions in that way in cases of emergency. Well, he said that it was possible that he should pursue a different course as an accoucheur; and therefore he would like her to tell him what course she pursued. She told him all about her method of making examinations, of tying the umbilical cord, of removing the placenta, of putting on the bandage. This lesson from Mother Mackey gave him more practical information than all he had ever learned from lectures and books. The case being a primipara, was tedious. At his first examination he told Mrs. Mackey he could feel nothing. She replied: "Young man, you will feel something with your fingers (putting the ends of the fingers of her left hand together, and putting the end of the forefinger of her right hand on the ends) like this, which is the womb, that contracts or opens when she has good expulsive pains, and will continue to open until the child is born." In spite of all this aid he says "he was so confused that he did not know any-

thing, and went fooling around to that extent that both he and the patient became disgusted."

It is not every young practitioner that finds a Mrs. Mackey to help him out with his first case. Meantime, each young graduate will generally be left to exercise his tact and book or lecture-room knowledge in the management of his first case of obstetrics. The exercise of extraordinary energy in suitable channels would enable most competent teachers of obstetrics to place at the disposal of their graduating class at least one case of labor for each student. The difficulties in the way have been, and can again be, overcome. That college which possesses a professor who does practically overcome them, would speedily become a very popular place for medical students of the best grade.

A Doctor Convicted of Manslaughter.

The *Med. Press and Circular* gives the account of a very sad case. As it is quite unusual, and we hope always will remain so, we give an abstract of it. Briefly the case was this: A competent medical man during his attendance upon a case of confinement, became drunk. The case being one of cross-birth, and the doctor neither sending for assistance, nor delivering the woman himself, she died from rupture of the uterus. Being tried and convicted, he was sentenced to five months' imprisonment, with hard labor. The judge, in passing sentence, remarked, "It is a very sad case. I know perfectly well what an effect a verdict like that must have upon your professional prospects. It is a most painful thing, I know, for a man of your education to stand in that dock and receive sentence. I know perfectly well that the punishment I am about to inflict upon you, will probably entail great suffering to you during the time you have to endure it. If you had been careless whether the woman lived or died I should have passed a heavy sentence; but I do not believe that was the case. I believe if you had kept your brains free from the influence of drink, in all probability this poor woman's life would have been saved, and she would have been delivered, as she had already been delivered of thirteen children, in safety and by your aid. But you gave way to drink, and in your inflamed condition, I have come to the conclusion you forgot what was due the case. You have already been in prison one month. I now order that you be

imprisoned and kept at hard labor for five months."

It seems, farther, from the history, that the husband of the woman was present, and during the visit of another practitioner who was called in, but refused to interfere. He did advise that further assistance be obtained. Why did not the husband see that such help was obtained, when he saw that the attendant was drunk? Further, why should the husband press upon a medical man alcohol, and keep pressing it until he became drunk, during an obstetrical attendance? It is in evidence that the husband did supply the doctor with the whiskey which made him drunk.

Why then was he not an accomplice in the crime?

Still, a doctor should know better than to drink any alcohol before his engaging in any important professional work. In this regard, without any reference to the right or wrong of the matter, they should have the same sense as professional gamblers, who are said to be the most sober of men, in order that their heads may be so vigorous as to be able to beat all their rivals. Of course there are other and better reasons why medical men should never drink alcohol, except as they take strychnia or other medicines. But even on the lower grounds of simple expediency, they should always avoid it when on professional duty.

The Prevention of Blindness.

A committee from the Great Britain Ophthalmological Society has lately been studying the causes of blindness in the several blind asylums of that country. The committee found that from twenty-five to forty per cent. of the blind were due to ophthalmia neonatorum. These results correspond with those reached by observers in Germany. Averaging all cases in all institutions, thirty per cent. are found to be due to this one cause. The report ends with the following:

"Purulent ophthalmia of new-born infants being the cause of a vast amount of blindness, mainly because of the ignorance of the public regarding its dangerous character, and the consequent neglect to apply for timely medical aid, it was desirable to instruct those in charge of new-born children by a card in substance as follows:

"INSTRUCTIONS REGARDING NEW-BORN INFANTS.—If the child's eyelids become red and swollen, or begin to run with matter, within a few days after birth, it is to be taken

without delay to a doctor. The disease is very dangerous, and if not treated at once, may destroy the sight of both eyes.'"

All agencies possible were ordered to be used to scatter this card among all having charge of little children, in any considerable numbers.

This is a very important subject, for in America, as in the old world, a large proportion of cases of blindness come from the same cause, neglected purulent ophthalmia of the new-born.

A committee was appointed by the ophthalmological section of the American Medical Association to investigate and report upon the measures necessary to prevent the occurrence of this sort of eye disease. Dr. S. L. Jones, of Chicago, was made chairman. If he has made any report, we have not seen it. Perhaps he is investigating the subject, and will report at the next meeting. In lieu of some such action as this, all health officers should bring this matter to the notice of the institutions within the territory over which they have a health jurisdiction. To save thirty per cent. of the cases of actual blindness is an object worthy the efforts of any and all health officers.

State Boards of Medical Examiners.—Recent Efforts for their Establishment.

At the last meeting of the Ohio State Medical Society, a resolution was passed calling for the appointment of a State Board of Medical Examiners, who should examine all who desire to practice medicine in Ohio, whether they be graduates or not. None of these examiners were to have any connection with any medical college. The diplomas of all medical colleges were no longer to count as licenses to practice medicine. The resolution was vigorously opposed, but the fact that it could be carried indicates the strength of the movement among such as attend the State Society meetings.

The Indiana State Medical Society passed a resolution affirming the desirability of such a movement. The New York profession are and have been laboring to accomplish the same purpose.

Of all the schemes for benefitting the profession by legislation, we regard this as the most hopeful. It makes medical colleges simple educational institutions, rather than license-vending mills. The honest, competent medical colleges will then stand a fair

chance. If the examining board be efficiently constituted, all will have to do better teaching or shut up. Students will not continue to attend such colleges as do not so train them that they may be able to pass the State examination. In fact, private tutors will have as good show as they do in New York in fitting college graduates so that they can pass the examinations needful to enter the place of Hospital Internes. That the agitation will go on with increasing vigor there can be no doubt. The past record of the movement fully shows this. The constant overcrowding of the profession will lead to more and more careful scrutiny into the causes which induce it, and the means for removing these causes.

Asiatic Cholera.

The rapid spread of this disease along the southern portion of France, and its gradual spread farther north, is the occasion of serious comment by the people of both Europe and America. At date of writing it shows daily increasing force and virulence. Dr. Koch, after a careful examination, affirms that it is genuine Asiatic cholera; that it will reach Germany; that it will go everywhere. Its past history warns us that it may reach the shores of America at any time. All health authorities are on the alert, the Marine Hospital Service, which the Government has made its agent in fighting epidemic diseases, has issued its orders to all its stations. Even the President of the United States has issued a proclamation on the subject.

This activity and warning intimates that the disease will not catch us asleep. Yet such is the dense ignorance and willful depravity of the great mass of the population of the large commercial centers, that very much will remain undone which would be helpful in protecting the people from this disease. Keep clean; keep clean, in person, in house, in place of business, in the street, in the back yard, in the privy, in the sewers, in the water supply, in the air of homes, in the food of all. Having done this we have done nearly all that it is possible for us to do. Yet, simple as is the injunction to keep clean, there are few who will heed it with any scrupulous exactness. It will need the stimulus of constant warning, and even the stern edict of the law, ere this can be brought about in any general way.

Mortality Statistics of Married Life at Different Ages.

In an address to young men, Dr. W. Pratt, of London, gives the following facts: In the male sex, from twenty-five to thirty years of age, one thousand married men furnish six deaths; one thousand bachelors furnish ten deaths; one thousand widowers furnish twenty-two deaths. If, however, the marriage be contracted before twenty, it is found that the mortality is seven times greater than among the unmarried. In the female sex the same facts hold true. Marriage under twenty increases the death rate seven fold, while marriage after twenty-one greatly diminishes the mortality. Young married people from eighteen to twenty die as rapidly as old people from sixty to seventy. Thus it appears that marriage after twenty-one makes life healthier as well as purer. Marriage after thirty years greatly increases the mortality of females in childbed. But in spite of all this, people will marry without any reference to reason or sound physiological laws. The majority will measurably follow the physiological law from simple instinct, and the rest will make a shipwreck of life.

Memoranda.

At Pskov, Russia, the plague has appeared with great virulence.

The fifth volume of the "Index Catalogue" has been sent to press.

The Garfield Memorial Hospital of Washington, D. C., is open for patients.

During June there were sixty-eight deaths from yellow fever in Havana, Cuba.

Dr. Wilson has successfully used the inner skin of the hen's egg for skin grafting.

Dr. Briggs, of Gainesville, Texas, announces a new medical journal at an early date.

The fertilizing material in Boston equals the excrement of one person in three barrels of water.

Koch thinks that it is possible to restrict cholera to India, if only governments would adopt his plan.

Hereafter the Marine Hospital will be supported by the tonnage tax instead of a tax upon each seaman.

A snake charmer lately died in New York from the bite of a rattle-snake. Even whiskey would not save him.

At a late Society, Dr. H. Wood held that diphtheria was simply a septic sore throat, and had no specific cause.

Koch says the English merchantmen do not hesitate to hide deaths which occur on voyages or to falsify logs.

Quains' Dictionary of Medicine has reached the ninth edition, the text of the last being identical with the first.

Billings says that "a very large part of the unpleasantness of this world, is due to people who are not fond of social dinners."

At its late meeting the Missouri State Medical Society decided that hereafter all voting members must be delegates from local societies.

The sewage of Pullman, Ills., is now poured into Lake Michigan. The model scheme to utilize the sewage has been entirely abandoned.

The *Medical Bulletin* claims for Philadelphia the distinction of being one of the dirtiest cities in the world. What is the trouble? Politics.

Legislation cannot make a people healthy who prefer, from ignorance or laziness, to live diseased and die prematurely.—*British Medical Journal*.

Can ship owners be constitutionally taxed for the support of their employees when they are sick? Such is the query ship owners are now asking.

An attendant at the Utica Asylum has been convicted of manslaughter in the second degree. The conviction was due to a legislative investigation.

The North Carolina *Med. Jour.* says that a candidate for a license to practice medicine on being asked "who discovered vaccination?" replied, "Virch-cow."

The statement was made in the Nebraska State Medical society, that the physicians of Omaha go beyond all codes and practice each man for himself.

Chicago has thirteen hospitals holding eleven hundred and thirteen beds. Only four of these are open to medical students. Only one is a free hospital.

There are already twenty-five dispensaries in New York City. But as these are insufficient a new one is to be opened—the Good Samaritan Dispensary.

Of the one hundred and eighteen original members of the New York Academy of Medicine, founded thirty-seven years ago, one hundred are now dead.

The increase in the facilities and means of instruction at the Medical Department of Yale College, has not been followed by an increase in the number of students.

The organization of a Society for Mutual Autopsy, in New York, recalls the remark of a Frenchman who said: "I had a friend once; I loved him. He died; I dissected him."

The Homœopaths think they will be installed in the White House, viz., if Blaine be elected President. They claim that homœopathy cured Blaine's sunstroke eight years ago.

Certain wards of Charity Hospital, New York, are to be set aside for the isolation of consumption. Thus the contagiousness of phthisis has gained substantial recognition.

A crematory furnace and sarcophagus have been lately excavated within the old Roman city at Lincoln. In the sarcophagus were found ten urns, containing dust and calcined bones.

Dr. Thos. F. Rumbold has relinquished the editorial chair of the St. Louis *Medical and Surgical Journal*. Dr. L. Atwood takes his place. The old editor takes a vacation in Europe.

An elderly lady sent for a doctor late at night because her mind was disturbed with the query, "whether it would be prudent for her to eat a baked apple the first thing in the morning."

The *Medical Record* suggests that many physicians would prefer to contribute simply to the memory of Gross, and not at the same time to the resources of a prosperous medical institution.

In 1832 Paris lost by cholera, 18,000 people; in 1849, 16,000; in 1853, 10,000; and in 1865, 12,000. It has begun already in 1884, and how many victims will be gathered in none can tell.

The North Carolina *Medical Journal* gives a case in which after the lapse of fifty years vaccine matter was found perfectly effective. It had been embedded in wax and enclosed in a wooden box.

We lately had a patient, in a married lady sixty years old, who affirmed that she never had been able to see anything during her life

that seemed to her worth laughing at. She had never laughed.

The Court of Appeals has decided that the United States Eclectic Medical Colleges of New York, and the Buffalo College of Physicians and Surgeons, are bogus. They now step down and out.

We have received the first number of Vol. I, of the *Annals of Hygiene*. It is edited by Dr. J. F. Edwards, and published by the editor at Philadelphia, at one dollar a year. Each number contains twenty-four double column pages.

The attendants upon medical societies are practically divided into three classes, "self-seekers," "good fellows," and "those seeking the good of science and the profession." To harmonize these constitutes the task of medical organizers.

The *Weekly Medical Review* complains that a little band of specialists belonging to the Missouri Medical Society, unite to get their papers located in the best hours and leave as soon as they have read their papers. It thinks that others should have a chance.

The editor of the *Courier Record of Medicine* was late in reaching the meeting of American Medical Editors, hence he did not enjoy the gathering. Go early next time, brother, and you will have ample opportunity for making yourself acquainted, etc.

The Surgeon of the U. S. Army says that he advises his post surgeons to get all the practice they can outside, so they may not grow rusty. It seems that some physicians about posts think their rights are invaded by this practice. Hence they are kicking.

The North Carolina *Medical Journal* estimates the actual expenses of the members of the American Medical Association during their attendance upon the late meeting in Washington, at sixty-five thousand dollars, exclusive of what they lost in practice.

A study of all the remedies employed for the relief of epilepsy show that the bromides afford the most satisfactory mode of treatment. Bennet shows that under it the attacks are stopped in twelve per-cent. of cases, lessened in eighty-three per-cent, and increased in about three per-cent.

The Alumni of Albany Medical College propose to have two lectures on the commencement day of the college. They will be given by Dr. W. H. Thomson, of New York,

next year upon the Germ Theory of Disease. It is a good idea, one to be imitated with advantage by other college alumni.

Washington is to have a bran new medical college, its name is the Medical Department of the National University. Washington only had three medical colleges before. Hence the need of the fourth. Can it be that enough members of the medical profession are left to form the faculty of still another college?

The *Sanitary Engineer* says that an efficient so-called system of sewerage can be adopted without any patent claims thereon. This is important as this system seems to be gaining in public esteem. The special point in this system was published three years before Col. Waring applied for his patent.

Of ninety-two children conceived during the siege of Paris by the Germans, M. Legrande du Saulle found that sixty-four had physical, intellectual or affective anomalies and the rest were small and sickly. Alcohol, inanition and the mental state of the parents all doubtless entered into the production of this state of things.

Lawson Tait reports five cases in which he opened the abdomen for rupture of the sac in extra-uterine pregnancy. Four cases out of five made an excellent recovery. In view of the fact that these cases die without treatment this result is very suggestive. He finds the rupture in the Fallopian tube. He removes the tube entire.

Gaillard's Medical Journal advises the profession of Texas not to think of establishing a medical college in that state. Of existing medical schools he says: "One-half of them are not only worthless, but dangerous to the public and to the profession." Texas has not a city of sufficient size to afford the requisite clinical material.

Respecting the *Journal of the American Medical Association*, the *Pacific Med. Jour.* says, "Nothing but praise, in our estimation, is due the editor for the able manner in which the Journal has been conducted, considering the circumstances; and if a little time is given, its influence will be felt throughout the length and breadth of the land."

Dr. Clark (*British Medical Journal*) presents some facts of general interest respecting the tobacco used in England. Last year there were imported into the kingdom more than fifty and one-half million pounds, paying a

duty of nearly as many dollars. The actual consumption was, on an average, one pound and twelve ounces for each person in the kingdom.

Our old friend, Dr. F. C. Curtis, of Albany, N. Y., has taken to himself a wife, Miss Lottie Bancroft, of Albany. He will have other pleasures and duties than teaching medical students dermatology, editing the *Medical Annals*, and practicing medicine. We join all his numerous friends in hearty congratulations and wishes for their ever increasing happiness.

Dr. Cory has proved, to the satisfaction of Dr. Bristowe, Dr. Humphrey, Dr. Ballard and Mr. Hutchinson, that he inoculated himself with syphilis by vaccinating himself with the pure lymph from the arms of syphilitic children. They believe that syphilis has thus been transmitted from one person to another, by means of the pure vaccine virus, without any mixture of blood.

The *Courier Record of Medicine* extols the shrewdness of the advertising done by the specialist who has a "Skin Hospital" or an "Invalid Home" or an "Inebriate Asylum," a "Private Sanitarium," or a "Home," or an "Infirmary" of one sort or another. These advertisers are very intolerant of all other sorts of advertising. The *Courier* says that it has shaken all such off.

The Berlin Scientific Society tendered Bismarck an honorary membership. He declined saying, "Nothing on earth would induce me to become in any way whatever the colleague of Virchow or Mommsen." Possibly the society will see the wisdom of ceasing to toady to Bismarck, a man who hates all scientific and other men who will not permit him to use them to further his own plans.

The *Medical Press and Circular* relates the story of a fashionable mother who, objecting to the scurfiness of the heads of her children who were recovering from scarlet fever, took them to a prominent hair dresser and had the scurf thoroughly removed by the machine-brush. A sample of cussedness, or cussed ignorance. Either a policeman or a school teacher is needed for this woman and all her kind.

The *Weekly Medical Review* will soon add to its title, "and Journal of Obstetrics and Diseases of Women." Dr. Englemann, of St. Louis, will have charge of the added department. The subscription price will be in-

creased to \$3.50 per year. We doubt not that it will be even more able than in the past in all its departments. Its past career has been one of incessant changes—mainly for the better.

French's study of the Nineteen Centuries of Drink in England is a very learned and interesting book. One point of especial note is that while other professions, notably the clerical, have in every period indulged largely in drink, the doctors have, as a whole, habitually been temperate. The instances given of excess in drink among doctors are very few. Drunkenness and scientific, honorable medicine are incompatible.

The medical appointments to the Cook County Hospital are said, by a *Medical Times* correspondent, to take place thus: "Commissioner Hans Olson nominates his friend Hans Jensen, M. D.; Commissioner Patrick Murphy nominates M. O'Flannigan, M. D.; Commissioner Bingerheimer nominates Dr. Ernst Sleisenger. They are unanimously elected." Thus the interests of a great hospital are handed over to mere politicians.

A writer in the *Medical Index* quotes a remark of a doctor in speaking of a woman who, while claiming to be a Christian, had performed many abortions upon herself. "What will this woman do when she knocks at the pearly gate, and, in reply to the question of the angel guard, 'Shall she be admitted?' there comes a response from half a dozen infant voices of 'No! no! We are afraid of her; she murdered us on earth!'"

Dr. J. R. Weist, in a paper read before the Indiana State Medical Society, says that in "'Henry County alone' judgments have been entered against physicians falsely accused of malpractice to the amount of fourteen thousand dollars." He asserts that each suit was encouraged by some rival of the doctor mulcted. When will medical men learn that their real interests are one? Any injustice done to one member reflects upon the rest.

Two English physicians were lately prosecuted by the father of a child upon whom they had operated for tracheotomy during an attack of diphtheria. The ground of complaint was that the doctors asked the father to suck out the tracheotomy tube in his child's trachea without warning him of the danger. The court decided that the medical men were fully justified in making the request. The medical profession paid all the expenses of the doctors.

The *Medical News* has received a circular from one of the Baltimore schools with a postal card for it to fill up in sending on a student as a beneficiary. The price of the regular ticket was less than the ticket of a first-class school, and the beneficiary ticket was about half that noted in the regular catalogue. The *News* does not approve of such *unlimited bidding*. Is there any medical man who does, aside from those whose immediate interests are thus built up?

The Cincinnati *Med. News*, in commenting upon Dr. Packard's remarks upon the *Journal of the American Medical Association*, says: "It is quite diverting, often times, how coolly some of our Eastern friends assume that all the learning of the country has its seat in the East. Such, however, are exceeding cosmopolitan. They only think so because it is so. They, of course, did not make it so—they only accept the fact, and will be exceedingly rejoiced when it is different."

The trustees of the Massachusetts *General Hospital* lately appointed a house-physician, in opposition to the wishes of a majority of the physicians on the staff of the hospital. As a result, Drs. Bigelow and Hodges resigned. For a long time that institution has been charged with favoritism in the manner in which the appointments were made. Of course, if the trustees think more of a green house-physician, than they do of the old experienced members of their staff, it is time the staff stepped down and out.

Competent witnesses assert that in New Orleans the filth in and about the houses of the people is greater in amount and more disgusting in quality than can be found in any other city on the globe. In spite of this the State Board of Health of Louisiana prates majestically about the "Sovereign State" as able to take care of itself. If it does not look after its sanitary condition it is likely to have its international exhibition all to itself. It was not so sovereign but that it could ask from Congress a million dollars for said exhibition.

The *Med. Record* publishes several letters from local physicians, boarders, and proprietors of summer resorts. One proprietor writes for some medical man who will be moderate enough in his charges not to bring his place into disrepute. He says, "Dr. X., who was here last year, charged Mrs. L.—\$5 for brushing by her on the piazza, and \$10 for putting her baby in the omnibus."

These things make his hotel unpopular. He wants a change. The trials of the local doctors are well known as are those of the heads of families. But hotel men do not squeal so often.

Sir James Paget, by computation finds that the loss owing to the sickness of the working people of Great Britain, amounts to twenty million pounds per week. This is bad, and calls for thoughtfulness as to the money value of health. We often wonder how many millions are lost each week from simple laziness; how many more from pure wickedness? Verily, the loss from these causes, entirely preventable, amount to very many hundreds of millions of dollars. As it is, the healthy, the industrious, the virtuous are compelled to support the rest in the poor-house, by charity, or in jail, etc.

Lænnec told one of his friends that he discovered the principle of auscultation thus: "One day in the court of the Louvre at Paris, he noticed children amusing themselves by holding a cylindrical piece of wood to the ear and scratching with a pin the farther end. Thus they heard a louder noise than the pin usually produces. At his next visit to his patients in the Hospital Necker, he made a hollow cylinder out of a roll of paper and applied it over the heart of a patient. This was the first stethoscope. After a time he used one made from cedar wood. In 1819 he published his treatise on Mediate Auscultation.

The *Weekly Drug News* tells the following: "A physician called for some bromine at a Hudson River town a short time since. The clerk opened a can in which the bottle was packed in plaster of Paris. Having made sure that he was right by an examination of the label, he dispensed the required amount of plaster in a paper, which was accepted by the doctor as what he had ordered. Some time after, the medical man re-appeared, and finding the pharmacist in, asked him for some more of the same bromine he had obtained there before, as it had worked like a charm." Bright pharmacist and brighter doctor.

A London correspondent of the *St. Louis Courier of Medicine*, says that, "The truth is that the training of nurses in the general hospitals interferes very much with the education of students, and this is becoming more apparent every day." Thus the students no longer sit up with tracheotomy cases, do not take daily temperature, do not make poul-

tices, do not bandage, do not give enemas, apply leeches, pass the female catheter, and all similar work. As a result they are less efficiently trained in that which relieves pain and gives comfort to the patient. As a result the nurse will soon be more welcome than the doctor.

The *Journal of Inebriety* says that insurance companies have an excessive mortality among their risks in certain portions of the south. An investigation showed that this excessive mortality was due to inebriety. The examiners and agents did not think it worth while to pay any attention to the company's instructions respecting the use of alcohol, unless the person had delirium tremens. As a result the companies sent out a special examiner. One of these found twenty-eight deaths all traced to the excessive use of alcohol. From one section of six counties, where the average loss to the company should have been sixty eight thousand dollars, it was found to be over one hundred and fifty thousand dollars. Inebriety is a disease which largely increases the death rate.

The first person admitted to membership in the American Medical Association under the new law was a man from California. Let it be remembered that all members of medical societies recognized by the American Medical Association can now become members of the latter body by sending to the Secretary of the same an application for membership signed by the President and Secretary of the society to which they belong. This membership is identical with permanent membership, so long as the annual dues are paid. It entitles the holder to receive the weekly journal of the association free during the period that he regularly pays his dues. Let all entitled to so send in their application at once. The Association should have twenty thousand members, instead of twenty-five hundred.

The North Carolina *Medical Journal* classifies the members of the American Medical Association, during its meeting thus: "The parliamentarian and resolution-maker; the horn-blower, with sonorous voice, putting in his little buncombe speech as chance permits; the medical politician, who may be seen at the hotels and in the lobby, laying pipes for the distribution of offices; the diligent and hard-working man, whose energy is intently bent upon making the scientific and literary

work creditable; the passive members, who good-naturally sit hour by hour to hear anything that may be said, sufficiently gratified if only they can hear the name of the speaker; the pleasure-seeking member who goes to the meeting to get away from hard work at home, is in his element when he can come across his old friends and see the sights; the patriachs, composed chiefly of ex-presidents; these are ever on the alert watching for the resolution-maker, lest he should slip in a damaging and disorganizing motion."

Dr. Pancost, late professor of anatomy in Jefferson Medical College, died some years since, leaving, it is said, more than a million dollars. Did any of it go to endow a chair in Jefferson Medical College? If so we have not heard of it. Dr. S. D. Gross died leaving an estate, it is said, of over a quarter of a million dollars. All of his children are handsomely provided for irrespective of this. Did he will any of it to Jefferson Medical College? His leaving a hundred thousand dollars to endow a chair of Pathological Anatomy or of Surgery in this college would have been tangible evidence that he believed in this school and was ready to do what he could to make it independent of students' fees. There are few men in the profession who could so well afford to contribute to the founding of a Gross Professorship, as Dr. Gross himself. A boom of the Gross Professorship would be more fitting had the estate started it with a subscription of an hundred thousand dollars, or more. Dr. Gross was a great man, but he received during his life the greatest honors and rewards possible in his profession, and his works will give him perennial glory.

Illustrative of the value of jury trials, involving questions of which the jury are profoundly ignorant, Dr. Gundry (Reports of the Maryland State Board of Health) gives the following: Sixteen years ago, in a rich and intelligent county, a case was on trial in which a huge distillery, with its attendant hog-pens, was complained of by the neighbors as a nuisance. It was shown that both the adjacent air and streams were so contaminated as to make the people in a near village uncomfortable, and in some cases a fever had been traced to it. Expert testimony showed the probable results of such a state of things. But the defense placed in the witness box a respectable looking farmer, who was well-to-do. He testified that the

nuisance complained of was not to be feared. He thought it really of an advantage. He said in proof of this that he owned a very bad smelling privy himself. The odor from this was terrible, but it sufficed to cure attacks of headache to which he was subject. The cure was accomplished by placing his face over the seat, and holding it there. The man was honest, and in ordinary things intelligent. His so-called practical knowledge outweighed the positive testimony of the other side and the theories of the experts. The jury found for the defendants. A couple of years later the neighborhood was scourged by an epidemic of fever.

Editor's Book Table.

Clouston's Clinical Lectures on Mental Diseases.*

This differs from the English edition in that the American editor, Dr. Chas. Folsom, has appended the laws of the United States, and of the individual States, relating to the custody of the insane. Since these laws vary greatly, it is needful that the practitioners of each locality have an easy access to the laws governing that locality.

As its title indicates, the style of the book is clinical throughout. In this respect it differs from most, if not all, of the larger works now before the public, and their name is "Legion." Like all clinical lectures, these before us appeal directly to the facts of diseases as seen in actual cases. The fact that the author is describing that which he has seen, gives his words a life and vividness not otherwise attainable.

Necessarily it lacks a full, systematic and general discussion of the questions brought forward. Hence all historical references must be omitted.

Two hundred and sixty cases of mental diseases are here described. Apparently the author has taken pains to select good types of the several diseases, rather than those of exceptional characters, and thus the book is rendered more useful to readers.

The classification employed is based upon symptoms. Thus he has eight different classes or varieties, viz: states of mental de-

pression; states of mental exaltation; states of regularly alternating mental conditions; states of fixed and limited delusion; states of mental enfeeblement; states of mental stupor; states of defective inhibition; and the insane diathesis. All of these varieties of mental diseases find their source in excess, defects and irregularities of the physiological functions of the brain. While mental diseases are thus classified, the individual cases in each class are very different from each other.

A considerable number of illustrations enforce the teachings of the text. In discussing the states of mental depression, he has occasion to describe a case in which the defective brain was upset by a sensational sermon, and he says concerning all unusual religious services, exciting preaching and revival meetings, that as a physician, he not only does not object to them, but thinks that they are only adapted to stolid healthy brains. On no account should they be attended by persons with weak heads, excitable dispositions and neurotic temperaments.

Referring to the effects upon the special senses of attacks of acute mania he reports a case of a man who required, before the attack, strong convex lenses in order to read fine print, during the attack could read the same fine print without any glasses. As the attack passed off he was compelled to wear increasingly strong glasses till he regained his former condition. It is not to be supposed that the form of the eyeball had changed at all, but that all nervous filaments were endowed with a temporarily increased functional activity. In the treatment of these exalted states the author points out the philosophy of the modern methods of treating the insane by the most progressive neurologists. The patients are encouraged to partake of physical activity, dancing, working on farms, in gardens, in shops, etc., in order to work off their excessive functional activity. During these attacks they must eat enormously else they get worse. Great activity of any sort wears out the body or brain, or both. The keeping of them at work so tames the most refractory that they are relatively quiet and much less restraint is required in their care.

But we have not space to longer dwell upon this book. We are sure that it will be regarded as interesting and instructive reading by all medical men, specialists or otherwise. We are of the opinion that general practitioners would do well to read it, as they are very likely to skip most works on mental diseases as being dry and out of their line of observa-

*CLINICAL LECTURES ON MENTAL DISEASES, BY T. S. Clouston, M. D., edited by Dr. Chas. F. Folsom. Philadelphia: Henry C. Lea's Son & Co. 1884. Cloth; pp. 550. For sale by Phillips and Hunt, Detroit.

tion. In fact, they should be the best posted of any persons as to the beginnings of all forms of insanity in order that they may recognize and have it properly treated while a cure is possible.

The book is published with the usual good taste of the house of H. C. Lea & Co.

Report of the West Virginia State Board of Health for 1881-82-83.*

The activity of this board in all that pertains to public health, puts to shame boards of some other and larger states. The volume before us contains over three hundred pages, and is full of material of interest to the people and to practical sanitarians. It contains the laws under which the board was organized, and fully explains its powers and limitations. It gives a full list of all practicing physicians in the state with the authority by which they are permitted to practice. It will be remembered that the West Virginia Board is charged with the duty of not only looking after the public health, but after the doctors who claim to be able to rectify morbid states. A considerable number of communications are published in the form of special papers. Thus Dr. Isaiah Bee gives an account of small pox in the Mercer and Wyoming counties. Dr. G. McDonald, in brief terms, describes the proper means for dealing with contagious diseases. Dr. John L. Dickey gives an interesting account of the diseases peculiar to the workers in iron and glass. As might be expected, these diseases depend more upon the dissipation of the workers than upon the unavoidable nature of their employment. Dr. George B. Moffett has an excellent paper upon the nursing of the sick. Dr. George H. Rhoe has a paper upon "The Relations of the Soil to Health." Dr. Charles Smart has a paper on "The Prevention of Malarial Diseases." Among the published articles are "Our Eyes and Our Industries," by Dr. B. J. Jeffries; "Ventilation," by Dr. J. M. Hull; "Treatment of the Drowned," by Dr. A. R. Barbee; "Prevention of Hereditary Constitutional Diseases," by Dr. Richardson; "Excessive Use of Tobacco," by Dr. James Evans; "Eminent Domain of Sanitary Science and the Usefulness of State Boards of Health in Guarding the Public Welfare," by Dr. James F. Reeves. In the veterinary department Dr.

D. F. Salmon discussed the "Texas Cattle Fever," and Dr. John C. Peters the "Pink-eye and Horse Scarlet Fever." Altogether the volume contains much of interest and profit to all citizens and most medical men. The Secretary, Dr. Reeves, has worked hard and long to make the work of this board an honor to the science it represents, and a source of good to all the people of West Virginia.

The One Hundredth Anniversary of the Formation of the Harvard Medical School.*

The elegant book before us details the exercises of dedicating the new building of the Harvard Medical School, and the anniversary exercises of its celebrating the one hundredth year of its existence. This was both fitting and praiseworthy. There is too little reverence for old things in this new country. Few things and buildings are one hundred years old. Then the erection of a new building for the study of medicine, at a cost of more than three hundred thousand dollars, in the heart of Boston, marks an era in medical progress. This is a move in the direction of an endowment of the professorships. The sooner this is accomplished, the better will it be both for the school, the profession and the people. The advance thus far indicates that as the conduct of a medical school is such that all about can realize that it is for the real good of the community rather than for the private advantage of a few professors at the expense of the general profession and the people, so will the rich be willing to endow it with money as they have endowed other educational establishments.

The work before us presents engravings of the little building in which medical lectures were delivered in 1783; the Mason street building, erected in 1815; the North Grove street building, erected in 1846; and the new building just completed. These buildings are land marks, not only of the progress of the school, but of medical arts and the general prosperity of the city in which the buildings were located. Dr. O. W. Holmes, in graphic terms, gives a word picture of the development of the school. President Eliot, Prof. Williams, Mr. Henry Lee, and others, contribute their part in the appropriate celebration of this auspicious day.

*REPORT OF THE SECRETARY OF THE STATE BOARD of Health of West Virginia for the three years ending December 1883. Wheeling, W. Va., 1884. Paper; pp. 305.

*ADDRESSES AND EXERCISES AT THE ONE HUNDREDTH Anniversary of the Foundation of the Medical School of Harvard University, Oct. 16, 1883. Cambridge, 1884. Paper, pp. 55.

Minutes of the Ninth Annual Meeting of the Arkansas State Medical Society.*

This is a very tasty publication of fifty-five pages, containing the president's address, a list of all members, and the brief minutes of the meeting. Papers were read and discussed as follows: By Dr. Bentley, on "Concussion of the spine from blows, falls and collisions;" by Dr. Hart, on "The germ theory of syphilis;" by Dr. Bond, on the "The co-relation between the medical and pharmaceutical professions;" by Dr. J. T. Jelks, on "Gynæcology;" by Dr. Christian, on "Some ideas about antiseptics and antiseptics," by Dr. Ewing, on "A case of procedentia of the uterus with rupture;" by Dr. Nichols, on "Practice of Medicine;" by Dr. Hart, on "The germ theory of disease;" by Dr. J. J. McAlmont, on "The use of opium in congestive forms of fevers;" by Dr. T. F. Murrell, on "Some hints on the management of dyspepsia;" by Dr. J. F. Blackburn, on "A case of gunshot wound of the abdomen, perforating the intestine;" by Dr. G. W. Hudson, on "A case of atrophy of the bladder, complicated by umbilical hernia;" by Dr. Jelks, on "A case of laceration of the cervix uteri and epithelioma."

It was decided that professors of medical colleges have no rights of an advertising nature which are forbidden to other members of the medical profession. In the efforts made to organize medical societies, it was found that the great obstacle was the demoralized state of the individual members. In his address Dr. Keller said that "It is a sad fact that because of the very illiteracy and ignorance of the average medical class, few of our best educated young men will enter it."

The Fifth Biennial Report of the Maryland State Board of Health.†

This volume is mainly occupied in a report of a sanitary convention held in Baltimore last fall. The plan is similar to that followed for several years by the Michigan State Board of Health. The object of these conventions is to interest the people at large in sanitary subjects as they exist immediately about them. The secretary remarks that the attendance of the people was not all that could be desired. The fact is, Baltimore is too

large a place for the best working of such conventions. Places of from three to ten thousand people show a far greater interest in these meetings than larger places. The experience of the Michigan State Board of Health has abundantly shown this fact.

The papers are mostly by good workers in their respective fields. The sanitary needs of Baltimore and its surroundings are discussed as to its sewerage, its bad air, its canning establishments, its late epidemics of small-pox, and the etiology of Baltimore catarrh. It is believed to be due to organisms which live upon the decomposing organic matter in and about the city.

Altogether, it may fairly be said that the meeting was a success. The paper of Col. Waring, on the proposed sewerage of Baltimore, and the reply of Dr. Chancellor, furnish interesting reading for all interested in such controversies.

Medical Register of New York, New Jersey, and Connecticut, for 1884.*

This forms the twenty-second volume of publication. It contains the names of six thousand two hundred and forty-seven physicians. Of course this includes but a small portion of the physicians actually practicing in these states. Exactly what constitutes the basis upon which the selection is made we do not know. We presume that only those names are published which belong to the reputable regular profession. But not only does the volume contain these names, but it also contains reliable information concerning all the medical colleges, medical societies, medical home, medical dispensaries, relief associations, national medical organizations, and all else of a medical sort found existing in these states. This information is difficult to obtain, and here it is presented in an authentic, convenient form. Dr. White, the painstaking editor, deserves the thanks of all parties for the able manner in which he has discharged his duties.

Transactions of the Missouri State Medical Society for 1883.†

This volume contains the minutes of the meeting, president's address, and twenty-four papers, with the discussion thereon. In the

*MINUTES OF THE STATE MEDICAL SOCIETY OF ARKANSAS at its Ninth Annual Session. Paper, pp. 55.

†FIFTH BIENNIAL REPORT OF THE STATE BOARD OF Health of Maryland. Paper, pp. 275.

*THE MEDICAL REGISTER OF NEW YORK, CONNECTICUT, and New Jersey, for 1884. By William T. White, M. D. New York: G. P. Putnam's Sons. 1884. Cloth, pp. 312.

†TRANSACTIONS OF THE MISSOURI STATE MEDICAL Association for 1883. Paper, pp. 263.

minutes we observe that the society thought it worth while to publicly repudiate the term allopath as false, misleading and derogatory to the profession, as it implies that medicine is sectarian in nature. The delegates to the American Medical Association were instructed to maintain the code of ethics of the association. The papers are usually brief. While they do not adduce anything new in the science or art of medicine, they do present in a readable shape very many questions of interest to the general profession. The work is published in the best style of the printer's art.

West Virginia State Medical Society Report.*

The president has a witty and instructive address. Dr. R. W. Hall makes a report upon epidemic diseases. Dr. J. M. Lazzell gives a report on new remedies. Dr. E. C. Myers discusses the germ theory of disease. Dr. D. P. Morgan presents the abuse of ergot in obstetric practice. Dr. Geo. H. Carpenter adduces the arguments which tend to show that insanity is a disease. Dr. S. L. Jepson treats of puerperal fever. Dr. R. W. Hall reports a case of intra-peritoneal hæmatocele, and Dr. C. F. Ulrich gives the records of some anomalous obstetrical cases. Altogether the report speaks well for the profession of West Virginia.

Leonard on Auscultation, Percussion and Urinalysis.†

In this little book of one hundred and sixty-six pages the author has embodied as much of the above mentioned subjects as it was possible for him to do. The chapter on Urinalysis was written by Dr. W. H. Rouse, and the illustrations taken from Casselmann. For those who desire a work of this character, this will do excellent service. It partakes of the special excellencies of the writer's works already so well known to the medical public.

Illiteracy in the United States.‡

This is a circular from the bureau of education of the United States. It shows by a

*TRANSACTIONS OF THE MEDICAL SOCIETY OF WEST VIRGINIA, 1883. Wheeling. 1883. Paper, pp. 80

† AUSCULTATION, PERCUSSION AND URINALYSIS. An epitome on the physical signs of the heart, lung, liver, kidney and spleen in health and disease. Edited by Dr. C. H. Leonard. Fully illustrated. The Illustrated Medical Journal Co. Detroit, Mich. Cloth, pp. 166. Price, \$1.00.

‡ CIRCULAR OF THE BUREAU OF EDUCATION. ILLITERACY in the U. S. in 1879, with diagrams and observations by Charles Warren, M. D. Washington, 1884. Paper, pp. 99.

very graphic method the extent of illiteracy in each state in the Union. Its object is to interest the people in providing more and better instruction in the Southern States. Since it was prepared seventy-seven millions of dollars have been appropriated by congress for this end, so that we may fully hope that illiteracy will be more rapidly wiped out of existence.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Nervous Diseases.

THE MINUTE ANATOMY OF THE CENTRAL ORGANS OF THE NERVOUS SYSTEM.—Prof. Golgi, of Pavia (*Alienist and Neurologist*, July, 1883), after a very elaborate and thorough study on this subject, summarises as follows:

First.—In studying the problem of the origin of the nerves; in the different provinces of the central nervous system, it becomes apparent that there exist some secondary differences, relative to the morphology, disposition and distribution of the elementary parts, but that in essential parts, as the relations between the cells and nervous fibres, there exist constant laws, and an absolute correspondence between the diverse provinces.

Second.—In general, the nervous cells, by their form, the special aspect of the cellular body and of the nucleus, the mode in which the prolongations have origin from them, as also by the aspect, and the mode of ramifying of the prolongations, may, by an expert observer, be differentiated from the other cellular elements; yet, no one of the characters assigned can be given as absolute. So true is this that, holding as the basis of our judgment these data alone, it is not a rare case to find that we must remain uncertain whether some cellular elements should be considered as of connective or nervous nature; and it is known that elements are not few, relative to which the judgements of histologists are contradictory. There is, however, an absolute characteristic datum from which a cell may, with certainty, be designated as nervous, and this consists in the presence of a prolongation (always unique), different from all others, and destined to be put into relation with the nervous fibres, or to be formed into these.

Third.—The so-called protoplasmic prolongations in no way, either directly or indi-

rectly, give origin to nervous fibres; from these they always maintain themselves independent; they have, on the contrary, intimate relations with the connective cells, therefore their functional purpose should be sought for from the point of view of the nutrition of the nervous texture; that is to say, they probably represent the paths through which the diffusion of the nutritive plasma is brought from blood vessels to the gangliar cells.

Fourth.—The gangliar cells of all the provinces of the nervous system, by a law which has no exception, are in relation with the nervous fibres by means of one, only, of their prolongations, that which, in homage to the author who first made it the subject of a particularized description, has been designated the prolongation of *Deiters*, or the cylinder axis prolongation. Wherefore, from the point of view of their specific function, all the central nerve cells may be considered as monopolar.

Fifth.—The fact, many times noted, that it is only by means of the nervous prolongation with which they are provided, that the gangliar cells are put into relation with the organs by which they extrinsicate their functional activities (nervous fibres of sense), is relative to another fact of notable importance, which is that the difference between the nervous cells of sense and those of motion, principally, if not exclusively, relates to the mode in which, by means of this prolongation, their connection with the corresponding fibres of sense and motion is effected. The relative differences as to the form, size, and also, with some exceptions, as to the situation of the gangliar cells, falls into a very secondary rank. As an evident corollary of this law we ought to hold that, in performing the anatomical study of the nervous centres, the function of the gangliar cells can, with secure foundation, be argued only from the deportment of the respective nervous prolongations, and from the manner in which their connection with corresponding fascies of nervous fibres of known function is effected.

Sixth.—All that has been asserted with regard to the nervous prolongation of the gangliar cells, first by *Deiters* and afterwards confirmed by the generality of the anatomists who have occupied themselves with this subject is erroneous, to-wit: That, maintaining constant simplicity, it passes directly to constitute the cylinder-axis of a nervous fibre. Instead of this, the rule is, that this prolongation gives origin, at greater or less distances from its departure to the cell, to a more or

less large number of filaments, which are so many nervous fibrillæ.

Seventh.—The behavior of the nervous prolongation is not alike in all the gangliar cells; indeed, in this respect notable differences may be shown; in many gangliar cells the nervous prolongation, subdividing complexly, takes part, in its totality, in the formation of a fine nervous network, which is found diffused in all the strata of the gray substance; in many gangliar cells, instead of this, the nervous prolongation, although it gives off some filaments, in like manner destined to take part in the formation of the above diffuse net-work, yet arrives in the medullary strata maintaining its proper individuality, and then in fact it forms the cylinder-axis of a medullary nervous fibre.

Eighth.—In relation to the different mode of behavior of the nervous prolongation, in the gray substance of the nervous centers, two types of gangliar cells may be distinguished, viz:

(a.) Gangliar cells whose nervous prolongation, though it gives off some lateral threads, maintains its proper individuality, and passes on to place itself in direct relation with the nervous fibres.

(b.) Gangliar cells whose nervous prolongation, subdividing completely, loses its proper individuality and takes part *in toto*, in the formation of a diffuse nervous network. These cells therefore, would have only indirect relation with the nervous fibres.

The arguments resulting from these accurate studies of the two types of cells mentioned, give a sufficiently valid foundation to the decision, that the cells of the first type are of motor, or psychomotor nature, and that those of the second type are, on the contrary, sensorial or psycho-sensorial.

Ninth.—The two types of gangliar cells recognized by us, far from being found separately in this or that other region of the central organs, are constantly found associated, at the most in some zones. As regards their different functions, there is noted a prevalence of one or of the other type, or it is observed that in the same zone, a series of cells belongs to the first type, whilst the others belong to the second.

Tenth.—The nervous fibres, also, entering into the different strata of the gray substance, may, in relation to the behavior of the respective cylinder-axis, be divided into two categories, viz:

(a.) Nervous fibres whose cylinder-axis, though it administers some secondary fibrillæ

(which, subdividing, are lost in the diffuse network), yet preserves its proper individuality, and passes on to place itself in the related nervous prolongation.

(b.) Nervous fibres, whose cylinder-axis, dividing completely, loses its proper individuality, and in totality takes part in the formation of the diffuse network mentioned.

In the same manner, as we judge the two types of gangliar cells described to belong, the one to the motor or psycho-motor sphere, and the other to the sensory, or psycho-sensory, so do we hold that the first category of nervous fibres belongs to the motor, and the second to the sensory sphere.

Eleventh.—In all the strata of the gray substance of the central nervous organs, there exists a fine and complicate diffuse nervous network, in the formation of which there occur:

(a.) The fibrillæ emanating from the nervous prolongation of the cells of the first type (motor or psycho-motor).

(b.) The nervous prolongation of the cells of the second type, in totality, decomposing completely (sensory, or psycho-sensory).

(c.) The nervous fibrillæ emanating from those nervous fibres which pass on to put themselves in direct relation with the gangliar cells of the first type (fibres of the first category.)

(d.) Many nervous fibres in totality, that is to say, those which, identically with nervous prolongation of the cells of the second type, decomposing into very slender filaments, and thus losing their proper individuality, pass on to be gradually confounded in the network in question.

The network here described is evidently destined to establish a bond of anatomical and functional union between the cellular elements of extensive zones of the gray substance of the centres.

Twelfth.—The several nervous fibres, far from being found in isolate, individual relation with a corresponding gangliar cell are, on the contrary, in the great majority of cases, found in connection with extensive groups of cells; but the opposite fact also is verified, that is to say, every (?) gangliar cell of the centers may be in relation with several nervous fibres, which have different destination and function.

Thirteenth.—In the relation between cells and nervous fibres, rather than the described individual and isolate connection being verified, there is observed an evidently direct

disposition, by which the greatest possible complications of relations is effected.

Fourteenth.—As a necessary deduction from all that precedes, we should hold that, up to the present time, we have continued to speak too arbitrarily of isolated transmission between peripheral points and the supposed cellular individualities of centers. Taking account of the data above described, we may, without reserve, declare that, from the so-called law of isolated transmission, in so far as it is wished to apply it to the mode of functioning of the gangliar cells, and the nervous fibres of the central organs, every vestige of anatomical basis is now taken away.

Fifteenth.—Another corollary, from what precedes, is that the concept of the so-called localization of the cerebral functions, taken in a rigorous sense (*i. e.*, that certain determinate functions may be referred to one or another zone, exactly limited), cannot be said to be in any manner supported by the results of minute anatomical researches.

THE VISUAL AREA IN THE BRAIN DETERMINED BY A STUDY OF HEMIANOPSIA.—Recent research in cerebral physiology has been directed toward the subject of the localization of sensory areas on the cortex of the brain, and has been productive of many very interesting discoveries. The investigations of Wernicke and Stilling in the anatomy of the brain, and the observations of numerous pathologists in cases of hemianopsia have confirmed in such a striking manner the conclusions of the physiologist, Munk, regarding the cortical area governing vision, that a summary of the facts made by Dr. M. Allen Starr, in the January number of the *American Journal of the Medical Sciences*, deserves attention. A knowledge of these facts is necessary both for the exact examination of cases and for an accurate record of autopsies; as it seems probable that many errors in the past have been due to the imperfect investigation of the symptoms and of lesions.

From an analysis of 32 recorded cases with autopsies, Dr. Starr reaches the following conclusions regarding the pathology of hemianopsia:

Lateral homonymous hemianopsia may be produced not only by a lesion of one optic tract, but also by a lesion situated either in the pulvinar of one optic thalamus; in the posterior part of one internal capsule or its radiation backward toward the occipital lobe; or in the cortex of one occipital lobe. Ex-

tensive or multiple lesions involving two or more of these portions of the brain produce the same symptom. Hence, a lesion in the course of the optic fibres of one side, at any point between the optic chiasm and their termination in the cortex of the occipital region, produces partial blindness of both eyes. It is, therefore, justifiable to conclude that the occipital lobe of each side is in anatomical and functional relation with both eyes; in such a manner that the like-named sides of both retinae are connected with the like-named hemisphere, *e.g.*, the right sides of both retinae with the right hemisphere, and *vice versa*. When the lesion of one hemisphere involves the optic fibres, at any point, partial blindness of both eyes, and not blindness of the opposite eye, is produced.

Any form of brain lesion, abscess, embolic softening, hemorrhage, tumors, chronic meningitis, if located in the course of the optic fibres or on the surface of the occipital lobe, may produce hemianopsia. The symptom is not due, therefore, to the shock of an apoplexy or embolism; nor to an increase of intracranial pressure; as cases occur in which neither of these conditions is present. It must therefore be regarded as a symptom indicating a local circumscribed lesion of one hemisphere, and not a general symptom (such as headache or coma) of brain-disease.

A study of the cases cited leads to the inevitable conclusion that the visual area lies in the occipital region; that the symptoms other than visual, cannot be referred to any lesion except to that of the occipital lobe; and that the right occipital lobe receives impressions from the right half of both eyes, and the left occipital lobe of the left half of both eyes.

With these facts in view the question arises, are there any means of locating the lesion present in a case of hemianopsia? Reference is here made to lateral homonymous hemianopsia. All other forms are due to a lesion of the optic chiasm or optic nerve. A review of the cases and a comparison of the symptoms with lesions will demonstrate that this is impossible. The lesion producing the hemianopsia may lie at any point in the course of the optic fibres from the chiasm to the occipital cortex, and in all cases the character of the hemianopsia may be the same. It is only from a study of the accompanying symptoms, therefore, that the lesion can be located. But each of the other symptoms may be due to lesions situated at various points. If it can be proven from the study of other symptoms that the lesion must be in one definite position,

and at the same time a lesion in that position would intercept the visual tract, a probable diagnosis may be reached.

HYPNOTISM.—Dr. D. H. Tuke, (*Journal of Mental Science*, April, 1883), comes to the following conclusions respecting hypnotism:—First: There may be consciousness during the state of hypnotism, and it may pass rapidly or slowly into complete unconsciousness, as in the somnambulistic state; the manifestations not being dependent upon the presence or absence of unconsciousness which is merely an epiphenomenon. Second: Voluntary control over the thoughts and actions is suspended. Third: The reflex action, therefore, of the cerebral cortex to suggestions from without, so long as any channel of communication is open, comes into play. Fourth: While consciousness is retained, the perception of this reflex or automatic cerebral action conveys the impression that there are two Egos. Fifth: Some of the mental functions, as memory, may be exalted, and there may be vivid hallucinations and delusions. Sixth: Unconscious reflex mimicry may be the only mental phenomenon present, the subject copying minutely everything said and done by the person with whom he is *en rapport*. Seventh: Impressions from without may be blocked at different points in the encephalon, according to the areas affected, and the completeness with which they are hypnotised; thus an impression or suggestion, whether by gesture or word, or muscular stimulus, may take the round of the basal ganglia only, or may pass to the cortex, and having reached the cortex, may excite ideation and reflex muscular action, with or without consciousness, and wholly independent of the will. Eighth: There may be indifferent states of hypnotism, exaltations, or depressions of sensations and the special senses.

CEREBRAL ATROPHY FROM AN EXTREMITY AMPUTATION.—Dr. Bourdon (*Progres Medical*, May 19, 1883,) has recently reported the case of an old soldier who had, forty years ago, had his arm disarticulated and who died in thirty-six hours from meningo-encephalitic congestion. Until this last illness, he had not had any cerebral symptoms; nevertheless, in the last years of his life, the left leg became, little by little, paretic. On autopsy there was found a marked diminution in the right hemisphere in the superior portion of the ascending frontal convolution, and in the paracentral lobule and on the crest of the hemisphere. The lateral ventricle of the same side was

much increased, especially to the centre of the affected convolution, which denoted an extended atrophy of the subjacent white tissue. The centre of the neighboring *corpus striatum* presented a depression and the optic thalamus was slightly flattened in a vertical direction. Section of the medulla showed that the median *raphé* deviated to the right, and that the nervous substance was notably atrophied. The right hemisphere weighed an ounce less than the left. Six similar cases have been elsewhere reported, which Dr. Bourdon claims demonstrate that amputation of a limb leads, by the functional inactivity therefrom resulting, to atrophy of the superior part of the motor zone of the cortex, and that such degeneration may affect, secondarily, the central portions of the brain, and finally the medulla oblongata. Dr. Bourdon believes that the paresis of the leg was due to an extension of the atrophy, a process favored by the age of the patient.

LOCOMOTOR ATAXIA TROPHO-NEUROSES—Drs. G. Ballet and Dutil (*Progrès Médical*, May 19, 1883,) in a recent article come to the following conclusions respecting the relations of locomotor ataxia and certain changes in the skin therefrom resulting: First, In tabetics certain permanent dermic changes of a trophic nature are to be observed. Second, These changes are different from any hitherto described. The eruptions (herpes, etc.), the ecchymoses, the perforating ulcer itself, are all expressions of an episodial temporary influence. The ichthyotoid state is a dystrophy of slow evolution and progressive nature like the osseous changes. Third, This dystrophy shows itself in a sort of skin thickening, with more or less defined discoloration, laxity of the integument, and desquamation of the epidermis, which latter results in formation of true scales on the surface of the the integument. Fourth, These ichthyotoid changes are most marked in places where disturbances of sensibility have been noticed, as anæsthesias, hyperæsthesias, sensations of cole, etc. The extremities, especially the upper extremities, are most affected. Sometimes the skin of the back of the hand presents a pellagra-like appearance. The falling of the nails and their alterations indicated by Joffroy, Pitres, Roques Dorneaux-Turon, are among the results of this ichthyotoid change which sometimes involves the ungual cicatrix, sometimes the integument, sometimes the two at once.

THE BREAD-PILL CURE OF HYSTERIA.—

M. M. Landouzy and Ballet, in the *Revue Mensuelle de Médecine*, give the history of an hysterical patient, to which it is well to give an extended publicity, not because it presents any novel feature, but as a proof of the scientific errors of those ill-trained minds, which attribute the cure of hysteria to supernatural influences. An hysterical patient, twenty-six years of age, who had previously suffered from chorea, was received in the wards of the charité. There was very marked contraction of the lower limbs, and the patient was unable to execute the slightest movement, not being even able to raise herself in bed. After one or two hypodermic injections of morphia, given at her express desire, she was told that she should have a more energetic remedy, and must use it cautiously. On October 7 bread-pills were prescribed, and the next morning she related that wishing to poison herself, she had swallowed the pills at once. The effect was terrible, but soon after she was able to walk a little, and eagerly asked to have another pill; this was accorded, and resulted in her complete recovery. Two days later on she helped to clean the wards. In a month's time she left the hospital.—(*Med. and Surg. Report. r.*)

PERVERTED SEXUAL INSTINCT.—Drs. Shaw and Ferris (*Journal of Nervous and Mental Diseases*), collected the details of nineteen cases in which there was congenital absence of sexual feeling toward the opposite sex.

In most of the cases the sexual desires appeared early, but tended toward the same sex, a perverted instinct that was beyond control.

Connected with this abnormal condition, was a passion for impersonating the opposite sex, while loving and adoring certain individuals of the same sex.

In all of these cases there was evidence of nervous and mental disturbances, varying from simple melancholia and hypochondriasis to insanity.

The family history of fourteen was obtained, revealing a neuropathic condition of near ancestors.

There was no abnormality of the genitals, and their bodies were generally well developed.

BRAIN ANÆMIA AND ELECTRICAL DEVITATION.—Dr. Orchansky (*Deutsche Medizinische Zeitung*, February 8, 1883), comes to the following conclusions after the experimentation

on dogs:—First: The loss of less than one-seventh the blood of an animal does not modify the excitability of the psycho-motor cerebral centrals. Second: The loss of between one-seventh and one-fifth of the blood increases irritability. The loss of a greater quantity causes diminution, and, finally, complete loss of excitability; the pulsation closes and the convolutions flatten. Third: When irritability is increased the animal is restless and agitated; when lessened, quasi-narcotism results. Fourth: These phenomena are not due to lessened blood pressure. Fifth: They are caused by induced anæmia acting through lowered cerebral nutrition.

INFANTINE SYPHILITIC PSEUDO-PARALYSIS.—Dr. Damaschino (*Journal de Médecine de Bordeaux*, May 20, 1883,) calls attention to the fact that there is a syphilitic pseudo-paralysis, which differs from infantile paralysis only in the fact that it is readily curable by sublimate baths.

Mental Diseases.

RELATION OF MENTAL DISEASES TO ALIMENTARY DISORDERS.—Dr. Fränkel has revived some of the old views as to the special relations of diseases of the alimentary tract to melancholia and other mental disorders. Esquirol and Schroeder van der Kolk fully recognized this relationship; but since the days of Griesinger it has been ignored. Besides the previously described lengthening, displacement, etc., of the colon, Fränkel has frequently noted in his cases irregularities in the position, etc., of the great omentum; these had apparently never been described by van der Kolk or other writers. Dr. Fränkel considers them to be of greater significance than the affections of the gut itself, inasmuch as adhesions and folding of the omentum must give rise to tension and pressure of the nerves contained in it. The peripheral irritation thus caused is acted on by the ganglion cells of the brain cortex, any part of which may, in his opinion, be affected, thus causing psychoses. Twenty-five cases were tabulated in his paper; in six the omentum was rolled up and hidden behind the stomach and descending colon, the transverse colon was at the same time arched downward; in four the omentum was affected as above, but the length and position of the colon was normal; in seven the omentum was shortened; in two it was adherent to the parietal

peritoneum; in two it was adherent to the pubic bone; in one both colon and omentum were displaced upward and to the left; in two the transverse colon was arched downward, but the omentum only slightly displaced; in one the transverse colon was S shaped, and displaced upward and to the left, but the omentum covered the whole of the front of the abdomen. There were nine cases of general paralysis, which exhibited during life either decided mental depression, or only very slightly developed extravagant delusions. The cases given extended over about four years, and occurred among fifty necropsies made during that period, about half of which were cases of general paralysis. He concluded that: First: Abnormal positions of the colon and great omentum may cause a psychosis, or unfavorably influence one which already exists. Second: Percussion of the abdomen is useful in the diagnosis of this condition. Third: Cold, wet compresses to the abdomen are frequently of use in the treatment. It must be obvious that Dr. Fränkel has mistaken, in most of his cases, effect for cause. Dr. Pons reports the case of a patient aged fifty-three, who was violent and excitable, all of which symptoms disappeared on the expulsion of a tænia. At one time cases of insanity, cured by replacing a retroverted womb, were frequent. All of these cases of so-called reflex insanity are now being looked on with suspicion. In the majority of cases the diagnosis of recovery from insanity was made by physicians who were laymenlike in their knowledge of psychiatry, or were doctrinaires.

Obstetrics.

REPORT OF THE MILITARY LYING-IN HOSPITAL OF COLCHESTER FOR 1881 AND 1882.—Dr. Forbes Dick (Surgeon-Major, A. M., M. D., in Medical Charge), states in this report that this hospital is simply a double wooden hut, joined at an angle, and is situated in the camp, which is surrounded by a high wall. It is divided into a confinement room of 1,386 cubic feet, and a lying-in ward of 2,520 cubic feet, and four small rooms which act as kitchen, office, store-room, and matron's room. The lying-in ward has four opposite windows, and is warmed by a central stove; the confinement room has a fireplace. These rooms communicate by opposite doors, which admit of the easy passage of a wheeled *lit de misère*.

Other cases of illness are also occasionally admitted for treatment.

In 1881 there were 55 deliveries. Of the mothers, 21 were primiparæ, and 34 pluriparæ; of the children, 32 were males, and 23 females. One female child was stillborn, and one male child died of defective development from prematurity in four hours, and another from cyanosis in twenty-four hours. All were head presentations, and the forceps were twice employed in primiparæ. There was no death of a mother.

In 1882 there were 51 deliveries. Of the mothers, 21 were primiparæ, and 30 pluriparæ; of the children, 34 were males, and 17 females. A very large male child of a primipara was stillborn, and also a female twin. A breech-born female child of a primipara was recovered. There was one twin case, one breech case, one forceps case, one case of puerperal fever, and one of puerperal mania. There was no death of a mother nor of a live-born child.

The percentage for the two years of primiparæ was 39.45. and of pluriparæ, 60.55; of male children, 62.26, and of female, 37.73; of still-births, 1.88; and of deaths of children from defective development, 1.89; of mothers, none; 106 mothers received 1,386 diets in hospital, or remained in it, on an average, 13.07 days, and went home with 102 children.

Both personal and general disinfection are carried out in the hospital. On admission, each woman has a footbath, and her knees are well washed. This is useful as much in a disciplinary as in a sanitary point of view. A 1 to 60 solution of carbolic acid, containing a minute quantity of cassia oil, which makes the smell agreeable, is used for syringing each case once, and some cases three times daily, and for frequently sponging the genitals. The same solution is evaporated on the central stove, which is very convenient for this purpose; and diapers are washed in chloride of lime water, and chloralum wool as a disinfectant absorbent has been lately placed under them. Chloralum wool soaked with lochia has remained six months in a stoppered bottle without tainted odor. It is believed to be a good aid to personal disinfection, and that it would well fulfil this purpose if more absorbent, by being better carded. For the hands, the carbolic solution, carbolic oil and the nail-brush are in constant use.

Six soldiers' wives were trained as midwives and nurses in 1881 and six in 1882.

The majority have left this station. Two are at present nursing in officers' families.

ON THE USE OF ANÆSTHETICS DURING LABOR.—In a paper (*Brit. Med. Jour.*) Dr. Savill indicates what he believes to be the main precautions, the observation of which would render the use of chloroform perfectly justifiable. 1.—There are certain women who have a tendency to flood at every confinement, and others in whom there seems an already too-great relaxation of fibre—weak anæmic females in their eighth or tenth confinement; and to these it would be undesirable to give chloroform, except for necessity. Happily, it is not these women who suffer the most pain, but rather those strong, healthy primiparæ whose pelves and general build approximate to the masculine type. 2.—We should not give it when labor is complicated with severe vomiting, or with acute heart or lung-disease, unless there is imperative call for it. 3.—It should not be given to the full extent, except for operation, convulsions, or spasm of the cervix; and then it is most necessary that one person should devote his entire attention to it. 4.—The inhalation should be stopped directly we find the pulse becoming very weak, or the respiration irregular. 5.—Anything which makes us suspect a fatty or enfeebled cardiac wall should make us cautious in the use of chloroform. Here, as in cases other than those of labor, it is not the most extensive valvular disease (so long as it be attended by compensating hypertrophy), but the atrophied or degenerate wall that constitutes the source of danger. Unfortunately, the signs of these conditions are subtle and uncertain. Fatty heart may be suspected by an exceedingly feeble cardiac impulse, combined with an almost inaudible first sound; or attacks of dyspnœa, vertigo, and syncope, in the absence of anæmia, or valvular lesion; or the copious deposit of fat in other parts of the body, and the occurrence of dropsy without adequate cause. A dilated heart may be suspected by increased area of præcordial dulness, combined with epigastric and venous pulsation, and a want of correspondence between the violence of the cardiac impulse and the strength of the pulse. Pericardial adhesions also form a great source of danger. They may be suspected when the heart's apex is fixed above its normal position, and does not shift with respiration; or when there is depression instead of protrusion of intercostal spaces over the position of the apex, giving a waxy character to the cardiac im-

pulse. 6.—In all cases we should take extra care to prevent the occurrence of hæmorrhage after birth; by giving a full dose of ergot when the head reaches the perinæum; by ceasing the chloroform immediately it is born; and by rousing the patient from her lethargy as soon as possible.

A SPINA BIFIDA PRESENTATION.—Mr. Charles Penruddock, M. R. C. S., writes (*Brit. Med. Jour.*):

On April 15th, 1883, I was called by the midwife to attend Mrs. B., who was in labor with her fourth child. Labor commenced at 2 P. M. on the previous day, the pains had been very severe until 10 P. M., but after that time became few and far between, and of very little force. When I saw Mrs. B., the pains appeared to be moderately strong but of short duration. There had been nothing abnormal in her previous confinements. On making an examination it was with great difficulty that I could reach the os, which I found nearly fully dilated; its margins were rather flaccid, and during a "pain" the presenting portion of the child exerted no pressure on them whatever.

From what I could feel of the presentation, I at first thought I had a face to deal with, there being something which very closely resembled the well-defined margins of the orbits; beyond this I thought I felt the nose, and a little further on, my finger slipped into what I at once took to be the mouth, only it was somewhat jagged inside as though it were lined with fully-developed teeth; I then came across a hand. I passed my hand into the vagina to make a more thorough examination, satisfied myself it was not the face, and at the same time could feel the unmistakable smooth outline of a child's hip, but owing to the above irregularities I was unable to tell clearly what the arrangement of parts could be, and decided to call in my friend and colleague, Mr. William Cox. We came to the conclusion that it was no face, but the lumbar region that presented, and therefore decided to turn. This was accomplished in the usual way, and the feet brought down, only slight difficulty was experienced until the head was being delivered, but with my left forefinger in the child's mouth and my right hand over its occiput, this was soon overcome. The placenta soon followed, and the mother made a good and rapid recovery. The child, a female, appearing to have been dead about twelve hours, was fully developed. The head was somewhat hydrocephalic. On further examining the

body we found the cause to be a large spina bifida situated in the middle of the lumbar region, and very much resembling to the touch the part for which I had at first mistaken. This case struck me as being very interesting in showing how a diseased condition of a fœtus may confound the diagnosis of the accoucheur.

MANAGEMENT OF THE THIRD STAGE OF LABOR.—Dr. P. F. Munde (*Archiv. Medicine*) gives the following rules respecting the management of this condition:

1. Always keep the supporting and compressing hand on the fundus uteri from the moment the head appears at the vulva until the placenta is expelled.
2. Do not hasten the expulsion of the placenta, but aid its total spontaneous detachment by steady, gentle friction.
3. Always watch the uterus with the hand, using gentle friction for at least an hour at interval, before leaving the patient.
4. Always give ergot immediately after the birth of the child. If chloroform has been given, or the labor has been unusually tedious, give the ergot hypodermically, near the umbilicus. Always have the syringe handy, filled ready for use.
5. If the uterus shows a reluctance to remain contracted, rub the fundus gently with a piece of ice, or insert a smooth piece into the cavity. (This is better than hot water at this time, unless actual hemorrhage occurs.)
6. Always make sure by palpation and compression that the uterus contains no coagula, and if such still form, at once express them.
7. Aid in securing permanent contraction of the uterus by an early application of the child to the breasts.
8. If any untoward symptoms are present, it is wise to guard against subinvolution, and its results, by giving the patient a pill containing one or two grains of Squibb's ext. ergot, two grains of quinine, and one-third of a grain of nux vomica, three times a day, for about twelve days.
9. An equally tight bandage should at once be applied, with pad if necessary.
10. Examine the cervix and vagina immediately after delivery, use mild astringent injections, or applications through the speculum. (Immediate suture does not seem feasible to him.)
11. The lying-in woman must remain quiet

and easy, and not leave her bed before the tenth day.

12. Keep watch of the bladder, and see that it does not interfere with uterine contraction.

13. Instruct the nurse to be very careful in giving the injections.

CASE OF INTERSTITIAL TUBO-GESTATION.

—Dr. Henry Habgood (*Brit. Med. Jour.*) describes the case of a married woman, aged 35, who died with all the symptoms of internal hæmorrhage, in the eleventh week of pregnancy. "At the necropsy there were about five pints of clotted blood in the pelvic and abdominal cavities. On turning this out, the source of the hæmorrhage proved to be a sac, formed by the uterine portion of the left Fallopian tube and the wall of the uterus, which had grown outwardly to about the size of a walnut, and then ruptured anteriorly, Chorion villi were distinctly visible in the sac. The opening of the tube into the sac had become obliterated. There was evidence of a previous partial rupture, in the shape of a small hæmatocele, on the posterior aspect of the sac. The foetus had escaped into the abdominal cavity, and was unfortunately lost. The left ovary was closely attached to the left side of the uterus by old bands of lymph, and contained several cysts. The right ovary was normal, and contained a corpus luteum. The uterus was enlarged, and its lining membrane was red and thickened, forming a distinct decidua, that could be easily detached. The bladder was healthy, but contained no urine. The abdominal organs were healthy, but very anæmic.

"With regard to the cause of the arrest of the ovum in that particular spot, I may remark that nothing existed in the Fallopian tube or uterus, in the shape of polypus or fibroid, to cause obstruction, but that there were plenty of adhesions on the left side, matting the uterus, Fallopian tube and ovary together, altering their relative positions, and, possibly, causing obstruction. Yet the presence of a corpus luteum in the right ovary, coupled with the cystic condition of the left, would point to the theory of transmigration of the ovum as being the most probable explanation of the phenomenon."

IMPERFORATE HYMEN PERSISTENT IN LABOR.—Mr. H. Grey Edwards, B. A., M. B., writes (*Brit. Med. Jour.*):

At 11 P. M., April 25th, 1884, I was called

to see S. O., primipara, aged 32, said to have been in labor since Monday morning, the 23rd ultimo. I found the patient to be suffering from severe "pains." On digital examination, I was somewhat surprised to find that the orifice of the vagina was completely closed by a tough membrane. Anteriorly, it was comparatively thin, and attached to the edge of the vaginal orifice, whence it sloped gradually backwards until, at the posterior wall, it was attached an inch and a half from the orifice. Here it was very thick, and gave the same sensation to the finger as the wall of the vagina itself. The foetal head could be easily felt through the tissue, which was perfectly lax, resisting all efforts at rupture with my finger.

Having decided to leave the uterus to do its best, I left, calling again at 4 A. M.; but, though the pains had been strong and frequent, things were much in the same condition. By sawing with my nail at the thinnest part, I eventually got the end of my finger in, and tore the hymen by drawing the finger backwards, until about halfway across, but I could not manage it further. I then waited an hour, in the hope that the remaining half would not be sufficient obstruction to delivery; but, "pains" becoming short and slight, I put on the forceps, and delivered without difficulty. The patient, is going on satisfactorily.

I have reported this case under the belief that such a tough condition of hymen is most unusual.

It is medico-legally interesting, that one single act of copulation, in spite of the seeming difficulties of the case, sufficed for impregnation.

A CASE OF CYSTOCELE COMPLICATING LABOR.—Mr. John H. Whitham, L. R. C. P. Ed., writes: (*Brit. Med. Jour.*)

On January 10th, a patient of mine, who was pregnant, complained to me that she had had "down-bearing pains" in the lower part of her body, and that she thought something had given way. I made a digital examination, and found a tumor protruding through the vulva. I could pass my finger behind it, and could recognize the os uteri high up and looking backwards; but anteriorly the tumor was attached. I concluded that it was a case of cystocele, and ordered my patient to preserve the recumbent position, making frequent use of the catheter myself, to prevent accumulation and decomposition of urine. The case went on without any inflammatory

symptoms until labor set in on the 29th ultimo. Early in the labor, the bladder and rectum were emptied. As the patient had a very roomy pelvis, I found that at first I could replace the tumor, and hold it up above the pubes by means of two fingers; but, as the pains became more intense, I was obliged to withdraw my fingers, and in doing so, the bladder followed them. I then consulted with Dr. Dobie, of Keighley, and the result was that I gave the patient a full dose of ergot, placed her in the knee-elbow position, replaced the tumor and held it in position until the next pain brought down the head well into the pelvis. After this, there was no further trouble; the case was quickly and easily terminated without further complication.

I have reported this case, not because any extraordinary treatment was adopted, but because I had to deal with a complication which is apparently rare, since I have fruitlessly consulted on this point several well-known midwifery books.

OBSTINATE VOMITING OF PREGNANCY: REASONS FOR REGARDING IT AS DUE TO INDIVIDUAL IDIOSYNCRASY.—Mr. Brock (*Glasgow Med. Jour.*) gives these as follows:

1. That obstinate vomiting occurs in multiparæ, where the uterine tissues are lax, and where the os is soft, easily dilatable, and even patent enough to admit the tips of two fingers. This causes me to reject the theory held by Bretonneau and Barnes.

2. That obstinate vomiting is absent in the majority of cases where there is a rigid state of the os, and where one would almost expect it invariably to be present, if the cause were that assigned by Dr. Barnes.

3. That obstinate vomiting is often absent in flexions and distortions of the uterus, and often present when there are no flexions or distortions. This would not be likely if Dr. Howitt's theory were true.

4. Obstinate vomiting is often absent in inflammatory conditions of the uterus, and present when there are no inflammatory conditions. This ought not to be the case if Dr. Bennett's theory be correct.

5. Because I believe a parallel condition is to be seen in other affections clearly influenced by the individual neurotic constitution; for instance, obstinate seasickness, the occasional vomiting that takes place in pseudocyesis, the proneness to convulsions in certain children when ill; or, to take a specific case, the vomiting simulating the obstinate

vomiting of pregnancy, in a non-pregnant woman, in whom the uterus was normal.

6. Because there is no definite line to be drawn between the ordinary cases of sickness in pregnancy and the more severe cases.

HOW LONG SHOULD ONE ABSTAIN FROM MIDWIFERY PRACTICE AFTER MAKING A POST-MORTEM EXAMINATION, OR AFTER A CASE OF PUERPERAL FEVER?—Dr. V. Swiecicki (Centb. f. Gynäk.; Am. Pract.) after referring to the divergence of opinions on this point entertained by various authors, such as Winckel, who recommends exclusion for a fortnight; Zweifel, who recommends it for a week; Shröder, for two days; Martin, for twenty-four hours, and Küstner, Ahlfeld, Macdonald, Volkmann, and others, who insist that thorough disinfection of hands, fingernails, clothing, and body of the physician or nurse are all that is necessary. The author records the case of a medical student who examined a midwifery case six days after having made a post-mortem examination, and who disinfected himself, every day, in the strictest manner. The patient was subsequently seized with diffuse peritonitis with parametritis, and passed through an attack of puerperal fever. The child was also infected and died on the twelfth day. Besides the student, the author, a practitioner, and the chief midwife examined the patient. The practitioner had made no recent post-mortem and the author and the midwife examined other patients the same day who developed no such symptoms as were in the case above mentioned. The author thinks that abstinence from midwifery practice after making a post-mortem examination, or after a case of puerperal fever is advisable.

HYDATIDIFORM DISEASE OF THE CHORION.

—Mr. Edward Stephens, M. R. C. S., writes: (*Brit. Med. Jour.*) "On September 7th, I was sent for by a midwife to attend Mrs. C., who was flooding. On my arrival, the hæmorrhage had stopped. On making an examination, the uterine sheath was not sufficiently dilated to be able to ascertain its contents. On passing my hand over the abdomen, I remarked to the midwife, how unusually circular it was. On the following afternoon, I was again hastily summoned, and found the woman had lost much blood. On making an examination, I found that, by a little manœuvring, I could insert my hand into the uterus; and I vividly remember how astonished the midwife and Mrs. C. looked,

when I informed them that it contained no child. In fact, Mrs. C. stoutly declared that she had felt the child many times; and that, being the mother of thirteen children, all living, she ought not to have been mistaken. After administering a full dose of ergot, some sharp uterine pains followed—soon expelling a mass, which, when collected, filled three ordinary-sized chamber utensils. After this jelly-like mass had been expelled, she rapidly recovered, and made an uninterrupted recovery."

TREATMENT OF PUERPERAL CONVULSIONS.—R. E. Haughton, M. D., *Indiana Med. Jour.*, Vol. 1, No. v.) reports a cure for puerperal fever, and its treatment as follows: Mrs. B., age 22 years, primipara, confined at term; labor natural and easily completed. For several weeks before confinement patient had complained of dizziness, so that when walking, blindness would come on and cause her to stagger. She had become plethoric also before confinement.

About three hours after confinement—the physician away—she had a convulsion, and also quite a hemorrhage. Removed clots from uterus and secured good contraction. Then gave drachm doses of fld. ext. veratrum viride. Two of these large doses were given and one dose of eight drops hypodermically. The pulse rapidly fell from 110 per minute to 53 per minute, when the convulsions ceased and did not return. Patient made a good recovery. The author has used veratrum viride since 1855, and believes it to be the best remedy for puerperal convulsions.

[Query: Why was not this patient bled before confinement for relief of the symptoms of dizziness, etc.?—ED.]

THE IMPROVED CESAREAN SECTION.—In the June number of the *Amer. Jour. Obstet.*, Dr. Garrigues concludes a long and exhaustive article on the above subject. In it he gives an account of a case, with a kyphotic pelvis, on which he operated. The description of the pelvis is complete.

When Caesarian section is called for, all things being equal, he prefers the following order: gastro-elytrotomy, Caesarian section, utero-ovarian amputation, and total extirpation of the uterus.

He operates under the spray, and believes in full Listerism.

He avoids the decidua in his deep uterine sutures, and aims to compress the bleeding sinuses.

He prefers silver and silk for sutures. Catgut, he says, has proved decidedly bad in the puerperal womb.

LONG RETENTION OF THE PLACENTA AFTER ABORTION.—Dr. S. L. Jepson (*Amer. Jour. Obstet.*) mentions two cases, in one of which the placenta was retained for one hundred and fifteen days, and in the other for sixty-six days. No harm resulted in either case, and both patients soon afterwards became again pregnant.

Diseases of Women.

EFFECTS OF REPAIR OF LACERATIONS OF THE CERVIX UTERI.—Dr. P. J. Murphy (*Amer. Jour. Obstet.*) from a collection of well-observed cases concludes:

1. That repair of lacerations of the cervix uteri is usually followed by sterility.
2. That the character of the labor is unusually severe and protracted, and that, in a large percentage, laceration occurs a second time.
3. That, in order to ascertain the benefit of surgical interference in such case, an examination should be instituted several months after the operation, to determine the condition of the cervical canal, and, if conception has taken place, the condition of the cervix following delivery.

Gynecology.

ÆTIOLOGY OF PERINEAL LACERATION.—At the recent meeting of the Amer. Gynecological Society, (*N. Y. Med. Jour.*) Dr. Thomas Addis Emmet, of New York, read a paper on the above subject, a notable feature of which was an expression of the author's belief that in ordinary cases of laceration of the perinæum no symptoms were produced by the injury, after it had once healed, except those of a reflex nature. In many cases of complete rupture, the pelvic organs would still be found in their normal situation. Moreover, the ordinary forms of operation for closing perineal laceration rarely, if ever, overcame the symptoms for which they were undertaken. The explanation was, that it was not a solution of continuity affecting the muscular structure of the perinæum that constituted the symptoms, nor the restoration of that structure that would accomplish the cure of such symptoms; it was the concomitant injury of

the fascial structures of the pelvis that was of consequence, and it was to the repair of those that our attention should be directed. Frequently the pelvic fascia was overstretched in difficult labor, especially if the perinæum was "supported." In the operation for restoring the perinæum, it was useless to carry the denudation so far externally as was often done. It should be limited to the true ostium vaginae, and the perinæum should be further strengthened by bringing forward a transverse fold of the posterior wall of the vagina, even if there was no proctocoele. The mistake should be avoided, however, of taking up too much of the posterior wall, for that would give rise to an amount of tension that would make it necessary to remove the sutures to prevent their cutting out. The author had used perforated shot with sutures of silk-worm gut, and had been pleased with the efficiency of this device. During the past year all his operations had been done by the method described.

NON-PUERPERAL PELVIC LYMPHADENITIS AND LYMPHANGITIS.—Dr. Paul F. Mundie (*Amer. Jour. Obstet.*, Oct. '83) calls attention to the distribution of the fine net work of lymphatics surrounding the uterus, ovaries and tubes, and which intersects the pelvic cellular tissues in all its recesses, and also mentions the fact that very little is said in regard to their being connected with glands. He has met with, and reports several cases where these glands and lymphatic vessels were in a diseased condition in non-puerperal women, and in which they simulated very closely "chronic pelvic cellulitis." He concludes by calling attention to the following points in his paper:

1. That inflammation of the pelvic lymphatic glands and vessels occurs in the non-puerperal state far more frequently than is generally supposed.
2. That such inflammation generally becomes chronic, and very closely simulates so-called "chronic pelvic peritonitis and cellulitis," both in its symptoms and physical properties.
3. That such lymphatics in a state of chronic inflammation possess certain characteristic features which permit their recognition by the examining finger
4. That this inflammation may either depend on and be secondary to uterine disease, or be entirely confined to the lymphatics and be apparently idiopathic; and,

5. That the treatment resembles that of chronic pelvic inflammation, with one exception, viz., the primary necessity for the removal of the focus of irritation, if such exist before the lymphatic inflammation can be permanently relieved.

ANTERIOR AND POSTERIOR DISPLACEMENTS OF THE UTERUS—THEIR TREATMENT.—Dr. Macan (*Amer. Jour. Obstet.*) summarizes his studies thus:

1. The normal position of the uterus, when the bladder is empty, is one of ante flexion. Hence mechanical treatment of ante flexion is rarely called for, and if symptoms be present, our efforts should generally be directed to the cure of the complication.

2. In retroflexion, or versions, the primary indication is to treat the displacement. In order to do this effectually we should place the uterus in a position of exaggerated anteversion, and then fix the cervix posteriorly by a pessary.

3. Hodge's pessary, or any other pessary used for the cure of retroflexion, when uncomplicated with adhesion, should act by fixing the cervix posteriorly, and not by pressing against the fundus and elevating it.

4. Versions are, so far, more serious than flexions, in that they are caused by rigidity of the uterine perenchyma, which is generally due to chronic metritis.

5. To make the results of the bimanual examination of any use for comparison with the results of other observers, it must be made in the dorsal position, the bladder having been previously emptied.

6. A great deal of the confusion that exists about the treatment of anterior and posterior displacements originates in its being taken for granted that any treatment that is found suited to an anterior displacement must be equally suited to a posterior one, and *vice versa*.

Surgery.

NEW METHOD OF PROCEDURE IN OPERATING FOR VESICO-VAGINAL FISTULA.—W. B. Rogers, M. D., (*Mississippi Valley Medical Monthly*, Vol. III, No. I,) says that in a case of extensive vesico vaginal fistula, he employed a colpeurynter to fix the wall of the bladder and vaginal septum. The fistula being large he threaded the eye of a catheter with a piece of suture silk—passed the catheter and silk through the urethra into the

bladder and through the fistula into the vagina. Then holding the silk with a forceps he withdrew the catheter and looping the silk around the stem of the colpeurynter he readily drew the colpeurynter into the bladder.—The patient had previously been anæsthetized. Once in place the colpeurynter was inflated and served the purpose of fixing the septum and replacing the prolapsed mucous lining of the bladder. The Sims' speculum was used to display the fistula. After paring the edges of the fistula and inserting the wires the colpeurynter was allowed to collapse and withdrawn through the fistula. A thinner rubber could be passed through the urethra if the fistula was small, even if became necessary to dilate the urethra in order to do so.

(So far as inquiry goes, this new method of fixing the vesico-vaginal septum is original with Dr. Rogers, and it certainly merits a further trial. Ed.)

On CAUSTIC ANÆSTHESIA.—M. Jules Guerin (*France Medicale; Weekly Med. Rev.*), gives the record of a case of ulcerated scirrhus of the breast, treated in the above manner.

The operation was as follows: A layer of Vienna paste was applied two centimeters in height and width, maintained and limited by a double band of adhesive plaster. The patient says that all pain, which had been moderate, had ceased. It was left on twenty minutes in all, and when removed the surface was wiped with a cloth containing vinegar, and a black, perfectly regular band was observed.

The breast was suspended on a wire carried under it by a probe, and cut loose from its cutaneous periphery, and torn loose with the fingers.

The operation lasted ten minutes, and only two spoonfuls of blood were lost.

The patient suffered no pain during the operation. "The after consequences were of the simplest and happiest."

There was no fever, no rigor, nor raised temperature.

The wound healed by regular, healthy, and complete granulation.

The band of the eschar formed an impassable barrier to the fluids, and thus prevented absorption.

THE TREATMENT OF INCREASED ARTERIAL TENSION.—Solomon Charles Smith, M. D. (*British Medical Journal*), after discussing this subject, and dwelling at length on the physiology of the circulation, concludes that the presence of increased arterial tension of

blood pressure involves the existence of obstruction at one end, and increased heart-force at the other; that it is important to distinguish between these two conditions; that the form of trace usually considered indicative of high tension really only shows obstruction, which, while necessarily occurring with it, may also occur by itself; that the measure of the tension is the pressure required to stop pulsation in the artery or the circulation in the limb; and that while we should always try to reduce abnormal obstruction, we should but seldom interfere with the tension as such, unless it threaten danger to the heart or vessels.

WOUNDS OF THE HEART.—Among the numerous wounds of the heart just now going the rounds of the medical press there has not been cited the case of Biffi (*Archivio Italiano per la Malattie Nervose*, 1869,) and the case of Valsalod, cited by the same author. The first case was that of a lunatic, who introduced a needle into the left side of the heart, which penetrated into both cavities. The needle was found on autopsy (there had been no marked symptoms from its presence in the heart) 22 months after its introduction. It was adherent to the mitral valve. The second case was that of a shoemaker, who stabbed himself with a poinard. He recovered from the wound, and 19 years after, the cicatrix of a penetrating wound of the heart was found on autopsy.

A NEW FIELD FOR THE ASPIRATOR.—A. H. Garnet, M. D., (*Cincinnati Lancet and Clinic*, January 6th, 1883,) says, after having tried in vain to relieve a patient suffering from retention of urine, we were about at our wits' ends when the aspirator was brought out. (Miller with the stomach-pump combined.) The needle was detached and the rubber attached to a catheter, previously introduced into the bladder.

The aspirator was then worked upon the principle for which it was devised, and the powerful suction not only dislodged the clots, but drew them through the instrument and they were discharged along with the urine through the escape tube of the aspirator to the relief of both doctors and the patient.

A singular accident is reported, by Dr. Allen, of a fold of mucous membrane following the urine through the eye of a catheter and holding it until smartly twisted loose.

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Original Communications.

Notes on the Treatment of Trachoma by Jequrity.*

BY LEARTUS CONNOR, A. M., M. D.†

The use of this remedy for diseased eyelids has long been known in Brazil. Thence coming to the notice of De Wecker, of Paris, it has been introduced, in a brief period, to all civilized nations. From De Wecker's first published accounts it was evident that it was an agent of great power. Hence conservative minds were slow to employ it before its powers were more exactly defined. As a definition of these powers is steadily progressing, it is worth while to occasionally stop and so examine the facts and to determine their present status.

Beginning with a very brief account of the results of my own observations, I shall add thereto those of a considerable number of observers scattered over this country and Europe. From these data we shall be able to determine the points upon which all agree and those upon which there still remains more or less doubt. During the past year ten cases have come under my notice in private practice which seemed suitable for the treatment by jequrity. The solutions used were prepared by myself after the plan proposed by DeWecker, viz: a three per cent. solution always used fresh. The applications were made but once in twenty-four hours. Since the treatment of the ten cases referred to, I have treated one case with a solution of jequrity in glycerine. This has preserved all its virtues for more than a month and in all respects acts the same as the fresh solution made with cold water.

All the ten cases treated with a watery fresh solution of jequrity were in the dry state of trachoma, and complicated more or less with pannus. In each case the relief was prompt, and far more considerable than I have obtained in similar cases in the same period by old methods. In no instance was there any un-

toward result. The peculiar jequrity conjunctivitis was obtained with varying degrees of ease in the several eyes. In some cases a single application sufficed, and in others more were required.

I was very careful not to apply jequrity to any eye in which there was any existing purulent or catarrhal conjunctivitis. My reason for this was that I feared the jequrity would simply intensify the existing inflammation rather than produce its own peculiar conjunctivitis, upon which I depended for the relief of the morbid state of the eye. As will be seen by the statement of others, this result has actually followed, and sometimes with very disastrous results. Thus it will appear that I have employed jequrity to cure the results of trachoma rather than trachoma itself. A fair view of the present state of the entire facts available will convince most that this is in truth the proper field for the use of jequrity. In so far all reports agree that jequrity is a safe and useful remedy. For its use under other circumstances, there still remains a broad field for study. But if we confine its use to this class of cases alone, we have a most important addition to the materia medica. Thus it has cured those chronic cases that linger about the eye hospital for an indefinite period of time, so that instead of the wards containing from twenty to fifty cases of old trachoma, they are reduced to a half dozen more or less. We have no doubt that farther study will determine other fields for its usefulness, but for the average practitioner it will be wise to keep within these limits.

Dr. E. Klein (*Centralblatt f. d. Med. etc.*) gives the experiments which he performed to determine the active principle of the jequrity infusion. He prepared jequrity infusion carefully, filtering in such a manner as to avoid all possible contact with the air. Small quantities of the filtrate were introduced by means of a capillary pipette into the conjunctiva bulbi of rabbits, and by the same pipette into test-tubes containing sterilized nutritive fluids. This latter operation was done without permitting atmospheric germs to affect an en-

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trance at the same time. The results in every case were violent jequirity ophthalmia in the rabbits, and absolute freedom from bacilli in the test-tubes, although the latter were kept at a suitable temperature for the growth of the micro-organisms if they had been present. A repetition of this series of experiments produced the same results. The boiling of a filtered infusion destroyed its power of exciting ophthalmia. Klein regards this as due to a destruction of some sort of ferment rather than the death of the bacilli. On applying to the conjunctiva the bacilli alone no ophthalmia resulted.

From these experiments he concludes that the active principle in jequirity infusions has nothing to do with bacilli.

Neisser (*Centralblatt f. prakt. Augenheil.*) from a careful study reaches the following results:

1. Infusions which are kept free from bacilli remain for long periods as active as fresh infusions containing bacilli. With the formation of bacilli their activity decreases. Warm temperatures appear gradually to destroy their activity even in the absence of bacilli.

2. Inoculations with jequirity-bacilli cultivated in other fluids are without effect.

3. No bacilli are to be found either in the secretions from the inflamed conjunctiva nor in the tissues themselves in jequirity ophthalmia, and no results follow an inoculation with such secretions or tissues.

Salmonson and Holmönfeld (*Centralblatt f. prakt. Augenheilk.*, March, 1884,) say that they have found jequirity infusions free from bacilli active in producing ophthalmia. Also in the secretions and tissues of the inflamed eye they found no bacilli under the microscope. Inoculation of eyes with the jequirity bacilli was without effect. They found that the injection of the jequirity infusion under the skin of frogs killed them in a day or two. The blood of these frogs was found loaded with the jequirity bacilli. But the inoculation of the conjunctiva with this blood was without result. Hence they conclude that the active principle of jequirity is entirely distinct from the bacilli, and is probably a chemically poisonous substance. Farther experiments showed that this substance was insoluble in alcohol, benzoline, and chloroform; it is soluble in glycerine and water. Using twenty-five parts of pure glycerine to one part of the seeds they obtained a solution of great activity, which retained its activity unimpaired for a month.

The *Medical News*, August 9th, 1884, gives an account of some very elaborate researches into the nature of the active principle of jequirity. They were performed by Drs. Warden and Waddell, of the Medical College Hospital, Calcutta. They have detected an active proteid in jequirity which seems to have many properties in common with the venoms of serpents. They call the proteid "abrin," after *abrus precatorius*, the botanical name of jequirity. They give a clear account of their methods, as well as their results, and the means by which the *abrus* roots may be distinguished from those of the true liquorice, which they resemble.

Dr. L. DeWecker (*Archiv. Ophthalm.*, March, 1884) gives his views to that date upon the use of jequirity. He lays great emphasis upon the proper preparation of the infusion. The seeds are first crushed to remove the cortical part. Then they are ground in an ordinary coffee mill. Cold water is then poured upon them, and they are then set aside for three hours. The infusion is then filtered, and is ready for use. It must be prepared daily. He uses a strength of three per cent. This should be applied but once in forty-eight hours. In most cases a single application will produce a violent jequirity ophthalmia. If the cases be not cured, a second application may be made after an interval of a couple of weeks.

The dangers of jequirity ophthalmia are due to two causes: first, the use of too strong solutions; and second, the application to an eye already discharging. The cornea will be endangered by a jequirity application to an eye already discharging, or to one in which there is a beginning ophthalmia. The reason for this is, that under these circumstances the jequirity ophthalmia is not produced at all, but the existing inflammation is greatly intensified to such an extent as to endanger the cornea. The jequirity ophthalmia can only be produced by great difficulty, and by the observance of special precautions.

He says the cases in which the inflammation has spread from one eye to another, or endangered the cornea, have not been cases of jequirity ophthalmia, but of purulent ophthalmia. It follows that the use of the remedy should be restricted to cases in which the granulations are dry or rendered so by treatment. He does not recommend the remedy except in cases of old dry granulations. He thinks that those who have got bad results have done so because they have applied the

remedy to cases unsuitable. He finds no danger from the use of jequirity in parenchymatous keratitis, and chronic infiltration of the cornea; on the contrary, they are cleared up with unusual rapidity.

Mr. Arthur Benson (*Ophthalmic Review*, vol. III., p. 122), from clinical data, concludes: Ophthalmia can be produced by (1) the freshly powdered jequirity seeds; (2) the freshly made infusion; (3) the infusion after bacilli had grown in it; (4) the infusion six weeks old, and swarming with micro-organisms of most varied types; (5) the infusion after these bacilli had ceased motion, and sunk to the bottom of the vessel, apparently dead. He had never seen a typical bacillus during many examinations during all stages of the disease, in the discharges and membranes from eyes affected with the jequirity ophthalmia. The discharges and membranes were entirely devoid of infective qualities. He used the fresh infusion made from the seeds not decorticated, but passed through the coffee mill. He valued highly the use of jequirity in treating granular lids, and never saw any serious result therefrom. In one case there was a short attack of iritis after each application, and in some others infiltration of the cornea occurred.

Galezowski (*Receuil d'Ophthal.*, January, 1884) reports four cases of granular ophthalmia, and from these, with a study of the data furnished by other observers, he concludes: The facts so far presented show that the so-called cures of granulations consist in a temporary amelioration of the symptoms, and that the disease reappears soon after the cessation of treatment. While some observers report successful cures from the drug, others have either found the drug inefficacious or dangerous, on account of the intense inflammation it excites. In Galezowski's four cases three were attended by a return of the granulations about two months after the application of the remedy. Pannus is favorably influenced by jequirity, but this result is obtained from any irritating substance, and the action of jequirity in this regard is merely temporary.

Dr. W. W. Seely (*Arch. Oph.*, March, 1884,) gives the results of his clinical studies of jequirity in dispensary and private practice. He has never observed any purulence of the jequirity conjunctivitis, simply a swelling of the lids, the formation of a croupous membrane, and a complete disappearance of pannus and granulations. His experience

encourages him to continue the use of the drug.

Dr. J. F. Hotz (*Archives Oph.*, March, 1884,) says that his experience has extended over nine months, and includes one hundred cases. He has used two, three and five per cent. solutions made with a one per cent. solution of carbolic acid, or with cold water. The stronger solutions acted quicker, but otherwise as the weaker solutions. The severity of the inflammation seemed to depend upon the condition of the conjunctiva and the susceptibility of the individual, rather than on the strength of the infusion. An infusion made in fifteen minutes was as effective as one made in twenty-four hours. One application of a two per cent. solution in twenty-four hours was as effective as two or three applications a day. Two or three applications produced the severest reactions. The greatest severity of the ophthalmia was attained in twenty-four hours, and it always appeared so long as there was any adequate tissue in the conjunctiva. He concludes:

1. In fresh trachoma or acute relapses, jequirity aggravated the inflammation.

2. Chronic cases with very succulent conjunctiva and abundant secretion were not benefitted by jequirity.

3. In chronic cases with pale conjunctiva and scanty secretion, the jequirity ophthalmia usually accomplished a speedy absorption of the granulations.

4. Though the cornea became dull and opaque during the acme of the inflammation, it never suffered any permanent injury, even where abrasions or ulcerations existed:

5. Acute vascular keratitis was not benefitted; pannus accompanying trachoma quickly disappeared with the absorption of the granulations. But the most brilliant results were gained in the clearing up of inveterate trachomatous pannus amenable only to inoculation or peritomy.

Dr. W. F. Norris thinks jequirity should be confined to the most inveterate cases of granular lids where the cornea has long been completely permeated by blood vessels.—*Archiv. Ophthal.*, March, 1884.

Dr. C. J. Kipp (*Archiv. Ophthal.*, March, 1884,) says that his use of jequirity has been so unsatisfactory that he has discontinued it. His experience makes him think that it is a dangerous remedy.

Dr. E. Gruening (*Archiv. Ophthal.*, March, 1884,) reports fully twenty cases. Nine of these had acute or chronic granular conjunctivitis with clear cornea. In these cases

jequirity produced the usual effect upon the conjunctiva with ulceration of the clear cornea. The effect upon the granulations varied. In eight eyes the granulations persisted, in two eyes they disappeared, and in the remaining seven eyes they were transformed into ridges and patches and finally into raised cicatricial bands.

Of chronic granular conjunctivitis with pannus, and of zerosis of the conjunctiva with total pannus he records eleven cases with twenty-one eyes. In these cases such as had associated pannus and granulations the pannus disappeared and the granulations remained. Fourteen corneas became clear and seven remained hazy. In one case there formed a deep ulcer of the cornea, which left a bad scar on healing. In two months the granulations had returned and the pannus. He concludes:

1. The use of a five-per-cent solution of jequirity is attended with danger to the cornea.

2. The action of a two-per-cent solution, a two-and-a-half, and a five-per-cent upon granulations is inconstant. The granulations are either not affected at all or are changed into dense cicatricial tissue. Their disappearance without conjunctival alteration is rare.

3. Jequirity acts more favorably than any other known substance upon pannus accompanying or following the granular condition of the lids.

Dr. H. Knapp (*Archiv. Ophthalm.*, March, 1884), reports among other data three cases of acute diphtheria of the conjunctiva, with perforation of the cornea after one application of a fresh three-per-cent solution of jequirity. As the cases were treated in his hospital they had every possible care. He sums up his experience thus:

1. Jequirity cures trachoma more quickly, but less safely than other remedies.

2. Its action is highly beneficial in most cases, but neither uniform nor always controllable.

3. The cure of trachoma by jequirity as well as by nature and other remedies, is accompanied by more or less atrophy of the conjunctiva and formation of cicatricial tissue.

4. The greatest danger from the use of jequirity consists in the occasional development of a severe diphtheritic conjunctivitis followed by pyorrhœa and more or less extensive destruction of the cornea.

5. The use of jequirity ought to be re-

stricted to cases of old and intractable pannus, until cautious experimentation has determined the conditions under which we can obtain the benefit of this powerful remedy divested from its danger.

Dr. L. P. Walker (*Archiv. Ophthalm.*, March, 1884), reports thirteen cases of chronic granular ophthalmia with pannus, all of which were benefited very much by the use of jequirity infusion. The solution he uses has been good at the end of six months. He has observed no bad effects.

Dr. David Webster (*Archiv. Ophthalm.*, March, 1884), reports thirteen cases of chronic granular inflammation of the eyelids in which the jequirity infusion was used with much satisfaction. For such cases he thinks there is no other remedy able to compare with it.

Dr. J. J. Chisolm (*Arch. Ophthalm.*, March, 1864), reports an extensive use of jequirity for a year. He finds no uniformity in the susceptibility to its use. In three stout men the use of the jequirity was marked by severe rigor, high fever. In one case there was perforation of the cornea. He restricts its use to cases of trachoma with pannus. For these cases he regards it as the best remedy known.

Dr. Hasket Derby (*Arch. Ophthalm.*, March, 1884), reports the use of jequirity in twenty-four persons, in all thirty eyes. Pannus was entirely cleared off in twenty cases, it remained stationary in five, while vision diminished in five cases owing to corneal complications. In all there were seven cases of corneal complication. He thinks that jequirity is contra indicated in cases having a tendency to ulceration, and in cases with large and florid granulations.

Dr. M. Landesberg (*Jour. Amer. Med. Association*, July 12, 1884), has in the practice of others observed nine cases of granular lids treated by jequirity. Of these in five cases neither the granulations nor the pannus was improved. In two cases deep corneal ulcerations had resulted from the use of jequirity. One patient with zeropthalmus of both eyes lost one eye from the use of jequirity. In another case both eyes got progressively worse.

Dr. Coppez (*Annales D'Oculistique*), has used jequirity in the treatment of one hundred and sixty-four patients. One hundred and forty of these had granulations often complicated with old pannus, and resisted treatment for years. Most of the cases of pannus were cured in a month or two. He succeeded in the treatment of follicular conjunctivitis. In

papillary granulations, Coppez found jequirity inferior to nitrate of silver, sulphate of copper and acetate of lead.

M. Menacho, from a study of three hundred cases treated in DeWecker's clinic, concludes: In abscesses and ulcers of the cornea as a general rule as the vascularization develops itself in a uniform manner, slowly and progressively the more favorable is the cure. Especially favorable is the action of jequirity ophthalmia in torpid ulcers of the cornea, tenacious scrofulous pannus, consecutive stages of parenchymatous keratitis, infiltration and sclerosis.

DeWecker in the July *Archiv. Oph.*, discusses Knapp's unfavorable observations, and thinks that there must have been some purulency existing in the cases, else they would not have turned out so badly. But Knapp follows with a detailed account of each case, showing that the cases were exactly such as DeWecker recommends for the use of the jequirity.

Knapp thinks that the unfavorable observations reported, should call for a more extensive study of its nature and action, before it is used in a large variety of cases in the human species. He believes that past experience proves it to be of the greatest value in inveterate pannus, with advanced cicatrization of the conjunctiva.

Dr. Del. Toro (*Lond. Med. Record*), reports that in the treatment of nine cases of trachoma, dacrocystitis occurred in two cases. Simi, in the same journal reports that in the treatment of nine cases of trachoma, he had nine cases of dacrocystitis. Both observers think that the use of jequirity tends to produce dacrocystitis.

Dr. S. Pollack (*Am. Jour. Oph.*, June, 1884,) reports the results of fifty-one cases treated by jequirity. In one case the eye was lost by corneal complications. He is very particular to have his solutions made fresh of three per cent. strength. He concludes that jequirity is the most reliable and prompt remedy for the treatment of trachoma and pannus. The more inveterate the granulations the more efficient and striking the treatment. Pyorrhœa is no essential factor in the treatment, but a sero-purulent discharge is, as also a membrane on the palpebral conjunctiva. A sound bean and fresh infusion are absolutely essential.

Dr. J. A. Andrews (*N. Y. Med. Jour.*, May, 31, 1884,) gives his observations from the treatment of fifty-seven cases. In three cases there was no result. In seventeen

cases there was a partial cure. In the remaining cases the cure was perfect.

Dr. T. R. Pooley, in discussing Dr. Andrews's paper, said that his observations had taught him that jequirity was a dangerous agent, not to be used except in such cases as other methods failed to cure.

These quotations present an aggregate of at least eight hundred cases. It will be observed that the majority of observers admit the great service jequirity has rendered them, in enabling them to more rapidly and pleasantly cure their patients. But few eyes have been lost. Probably the same men in treating the same number of cases from this time onward, would make so much better selection of cases as to avoid all loss. Farther, it will be noticed that the treatment of trachoma, instead of extending over years, is completed in as many months. It is apparent that great caution must be observed in all the details of management of this treatment, in order to render it uniformly safe. That little knowledge and little skill and care has wrought even greater havoc with eyes than appears by our facts, no one will doubt who looks at the facts from a wider standpoint. But this will soon rectify itself, and the use of the remedy will finally be established firmly in the materia medica of eye affections.

From all this data we think the following conclusions are warranted:

1. The active principle of jequirity is some kind of a ferment or alkaloid. That its activity is not due to bacilli seems established. We may hope to isolate this principle in the near future and so obtain a more uniform preparation.
2. At present the most available solution is made of three per cent. of the powdered sound beans, macerated for several hours in cold water, and then filtered and used fresh. The use of glycerine as a solvent and preservative is not yet established. Nor is it clear that carbolic acid, or bichloride of mercury, or salicylic acid will act as a preservative of the solution.
3. The remedy should be applied but once in twenty-four hours, and only repeated if the desired jequirity ophthalmia is not produced. A new attack of this ophthalmia should not be induced under three weeks from the previous one. We have been able to limit the extent of any application by the frequent use of hot water baths, and a weak solution of bichloride of mercury.
4. The cases proper for its application are

chronic trachoma, with pannus, or parenchymatous keratitis, or old corneal opacity from any cause. But even in these cases it must not be employed if there be a suspicion of purulency complicating the disease. In acute cases of trachoma it is contraindicated.

5. It needs to be ranked in the general thought with the process of inoculation, and be used under the same circumstances. If so used it will do good and good only. If otherwise employed it may do much harm, especially in heedless or incompetent hands.

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Irritation of the Prostate.*

BY R. HARVEY REED, M. D., MANSFIELD, O.

IT is not surprising when we study for a moment the anatomy of the prostate, and consider the anatomical relations it holds to neighboring structures, that it is a gland, not only prone to certain forms of diseases, but when affected an exceedingly obstinate organ to relieve.

In the prostate we have a trilobuled gland located inferior to, and just in front of the bladder; the middle lobe of which lies immediately under the neck of the latter. The entire gland is traversed with the urethra in a zone corresponding to a line dividing the upper from the middle third of the gland from above downwards and about the middle of the lateral direction.

In addition to the urethra the gland is crossed diagonally in its lower two-thirds from behind forwards and upwards with the ejaculatory ducts on either side, and which terminate in the prostatic urethra about two-thirds of the way across the gland (measuring from behind forwards) in front of the verumontanum in a small sinus called the uterus masculinus.

About two-thirds of the gland is composed of muscular fiber, in which is deeply rooted numerous racemous glands, which with their ducts make up the remaining third of the gland.

The ducts of the glandular structure proper converge and finally open by a score or more of excretory ducts on either side of the verumontanum or urethral crest, only a few lines back of the apertures of the ejaculatory ducts.

This gland which might be roughly compared in size to an ordinary black walnut is

surrounded with a fibrous membrane, and supplied with blood from the vesical, pudic, and hemorrhoidal arteries, which are associated with an intricate plexus of veins which communicate with the internal iliac veins; and whilst the gland itself is not freely traversed with blood vessels it is, so to speak, hung in a hammock of arteries and veins; with the bladder on one side, the rectum below and the penis in front, with the gland itself perforated by three tubes and near which are the sub-urethral glands, the vesiculæ seminales, and vas deferens; while the entire body of the gland is traversed with ducts belonging to its own structure, all of which when united make its immediate anatomical structures together with those affecting it from its neighbors very complex; each differently affected yet all more or less influenced by the other. That the prostate serves a purpose in the generative act is, I think, now beyond any question; and that the act of copulation is not only modified by this gland, but the gland is more or less influenced by the act of copulation.

Although from comparative anatomy we learn that this gland is not only absent in the ruminantia, but double in some of the pachydermata, and single in the carnivora, while in the bird both this gland and the vesiculæ seminales are wanting, as is also the case in many of the amphibious animals and some species of fish.

With this brief review of the general anatomy of this very important and complex structure, which is so located as to not only be affected with diseases peculiar to itself, but to sympathize with the afflictions of many of its neighbors, we will proceed to consider our subject proper.

DEFINITION.—*Irritation of the prostate* may consist of a true or sympathetic congestion of all or a part of the prostate gland; or a catarrhal condition of all or a part of follicles and ducts of the racemose glands, or even involved the ejaculatory ducts; or it may consist of a hyperæsthesia of the nerve filaments supplying the gland, any one, or all of which will keep up an irritated condition of the gland unattended with a chill, or acute inflammation, and the graver symptoms of the more serious and destructive diseases of the gland.

CAUSES.—The causes which lead to an irritation of the prostate are masturbation, inordinate sexual excitement of any kind, cold or exposure, traumatic causes, gonorrhœa, sympathetic irritation from surrounding structures, such as constipation, diarrhœa, and

*A paper read before the Ohio State Medical Society, held at Columbus, June 10th, 11th, and 12th, 1884.

hemorrhoids; or cystitis, acute or chronic; morbid changes in the urine, vesical calculus, etc., etc.

SYMPTOMS.—In the milder forms of congestion the symptoms will not be more than a slight weight or fullness in the perineum, with perhaps a slightly increased desire to micturate, which is generally followed with an uneasy feeling in the region of the prostate and in the glans penis.

This morbid desire to void the urine is seldom observed in the early part of the day, but gradually increases towards the close of the day, and unless rest is sought will be worst just before retiring.

When the recumbent position with quiet is resorted to, relief is generally obtained; hence we find this class of patients troubled but little at night, and nearly always feeling the best in the morning.

They seldom complain of having had a chill, or being troubled with febrile disturbance, loss of appetite, or of marked constitutional disturbance other than that of having taken a slight cold, from which they can probably date their trouble.

A full-sized sound can be passed with little or no difficulty other than tenderness along the prostatic urethra.

A digital examination through the rectum will not reveal any perceptible enlargement, but a general tenderness over the entire gland.

An examination with a hollow bougie will not reveal any secretion exuding from the gland, of more than ordinary consequence, in the purely congestive form of this irritation.

Very frequently when this difficulty has been allowed to go on without relief, whether the congestion causing the irritation is the consequence of a cold, or the squela of an attack of gonorrhœa, or the result of continued sexual abuses, it will often cause a "catarrhal" irritation of the ducts and even the follicles of the gland, which may go on until it involves all or a greater part of these, and even extend to the ejaculatory ducts.

We have used the word "catarrhal," for the want of a better expression, although we do not believe this to be strictly "a catarrh" of these ducts or their follicles, for we have not profuse discharge, in fact scarcely any discharge or "flow" at all, but a blocking up of these ducts, with a thick, gummy, gelatinous, semi-solid material, of a greyish color, which I am satisfied in many instances forms the nucleus for a prostatic or even a vesical cal-

culus, or may degenerate into a calcarious mass and remain in the ducts of the gland for years, a constant source of irritation and annoyance.

Under these circumstances the patient will come to you complaining of a fullness, accompanied with tenderness in the perineum, a frequent desire to urinate, and sharp pain and contraction of the *acceleratus urinæ* muscles in the attempt to eject the last few drops of urine, but little or no pain is complained of except just at this time, other than previously mentioned.

When there is hyperæsthesia of the prostatic nerves, the most prominent symptom is the occurrence of nocturnal emissions, ranging from every few nights to as often as twice in a single night.

The patient generally suffers but little or no pain, although an examination with the sound, or bougie, combined with a digital examination in the rectum, will reveal considerable tenderness of the gland, while the muscles will in many of these cases be found more or less flabby, and the patient generally pale, anemic and exceedingly nervous.

Not unfrequently patients will come to the surgeon complaining of being impotent, which a careful examination will prove to be caused by an irritated condition of the prostate gland.

Out of 20 cases reported by Gross in the late edition of his little work on "Impotence and Sterility," he mentioned in his chapter on impotence thirteen as having hypersensitive, or irritable prostates. The same author says in his recent work just referred to: "I long ago reached the conclusion that impotence was generally induced by subacute or chronic inflammation, and morbid sensibility of the prostatic urethra."

The same writer in speaking of "atonic impotency," says: "The exciting causes were chronic hyperæsthesia and inflammation of the prostatic urethra."

In the disease we have a multiplicity of symptoms arising from a variety of causes, yet all producing an irritable condition of this gland, and seriously affecting the health of the patient.

DIAGNOSIS.—The diagnosis of this morbid condition is not always easy, although a careful consideration of the foregoing symptoms will aid very much in guiding us in the proper direction.

In the congestive form there is danger of mistaking it for cystitis, especially when the

cystic inflammation is confined to the neck of the bladder.

CYSTITIS.	IRRITATION OF THE PROSTATE.
A constant desire to void the urine.	Micturation more frequent, but not a constant desire, which is increased towards the afternoon and evening.
Great straining and tenesmus during micturation.	Weight and bearing down in the perineum. A slight smarting or tingling as the urine passes the prostate, accompanied with a prickling or burning sensation in the glans penis.
Urine ammoniacal, high colored and often loaded with mucus and pus.	Urine not much changed, excepting it is abnormally acid, and more highly colored.
Little or no tenderness of the prostate.	Marked tenderness over the prostate.
Pain and uneasiness over the pubes.	Pain and uneasiness in the perineum.
Epithelial casts of the bladder.	No epithelial casts of the bladder.
No casts of the prostatic ducts.	Casts of the prostatic ducts in the catarrhal form of irritation.
No pain in passing the catheter, except after reaching the bladder.	Pain in passing the catheter marked along the prostatic urethra.
Desire for copulation not increased, but usually diminished.	Desire for copulation increased rather than diminished.
Generally marked constitutional disturbances.	Seldom any marked constitutional disturbances.

In the catarrhal form an examination with the bulbous bougie usually aids in the diagnosis. This may be done by swabbing out the urethra carefully several times with a bulbous bougie, after which by gently passing a clean one past the gland and leaving it there until you pass the finger well into the rectum and keep up a process of kneading the gland gently, interchanging it for continued pressure; after keeping that up for a few minutes, gradually remove the bougie while the finger is still in the rectum and making firm pressure on the gland. An examination of the bulb of the bougie will generally reveal more or less exudation from the ducts of the gland; not infrequently a partial mould of them.

A microscopical examination of this exudation will reveal mucus mingled with epithelium cells, and in cases of long standing, occasional pus cells, mingled with crystals of magnesium phosphates, or the triple phosphates, all combining to form one heterogeneous mass; which seldom contains any sper-

matozoa, and when it does they are usually inactive.

There is usually no marked bloody or purulent discharge, or enlargement of the fibrous structure of the gland, or the usual clear transparent "white of egg" discharge, so common in prostaticorrhæa, or interruption in the flow of the urine, which is usually not subjected to marked chemical changes in the same, as is so commonly seen in acute or chronic prostatitis and cystitis.

In hyperæsthesia of the nerves supplying the prostate, we may have all or a part of the symptoms above described, but the most prominent symptom is the constant annoyance with nocturnal emissions, or almost irresistible desire for sexual intercourse under the least provocation, which often induces these patients to resort to masturbation, or unrestrained sexual abuses, which only increases their difficulty.

PROGNOSIS.—In giving a prognosis in this disease, too much discretion cannot be used by the surgeon. Every part of the field must be diligently surveyed, and carefully considered, their habits, general health, mental and moral surroundings, will power, are all important factors, as well as the particular form of the disease; and unless the surgeon has taken all these into consideration, as well as that of having secured the entire confidence of his patient, he will be sadly disappointed if he relies on a favorable prognosis; otherwise he can generally feel safe in giving his patient a fair amount of encouragement.

DURATION.—This difficulty may last for months and even years, fluctuating up and down according to the surrounding circumstances of the patient, like the Wall street stock markets.

If allowed to go on without proper care the patient is in constant danger of violent outbreaks in the gland structure itself, from the development of acute inflammation, or suppuration, calcarious degeneration, chronic enlargement, or the complications arising from the involvement of surrounding structures which may not only hazard the patient's health entirely, but sacrifice his life.

On the other hand I have known it to yield in a few weeks to treatment; although I have seen it continue for months and months before recovery would take place.

TREATMENT.—The first thing to do in the treatment of this disease is to gain the entire confidence of the patient, and then to ascertain the cause or causes producing the irritation.

If it is the result of masturbation, endeavor by all the means at your control to prevent its continuance.

I have seen patients who had this abominable and filthy habit so fixed on them that they would resort to it in their sleep night after night until I found it necessary to put tight drawers on them to prevent them from getting hold of their penis while asleep, and committing the act automatically as it were. Others again would knowingly and willingly yield to the temptation in the face of all my admonitions, and deliberately masturbate day in and day out notwithstanding all my warning against it, until I was obliged to paint the glans penis with some irritant or vesicant and thus destroy their pleasure in the act, until other remedies could be administered.

The remedies which have served me best under these circumstances have been bromides combined with extract of viburnum prunifolium, or extract of viburnum opulus, tinct. belladonna, ergot, or camphor, to sooth the sexual excitement.

Generally such tonics as strychnia, iron, quinine, arsenic, or the hypophosphites of sodium or calcium, are indicated, and prove highly beneficial in building up the general system, with which should be associated sufficient alternative to insure an active condition of the secretions.

Whilst locally if I cannot quiet the irritation by the use of injections of tepid water into the bowel just before or immediately after retiring, to which may be added hydrate of chloral, I give a suppository of hyoscyamus combined with iodoform and camphor.

In the inflammatory or congestive form, I have found the following to be very beneficial, especially where it is associated with scanty or high-colored urine.

B Pot. Brom., 3 ii.
Aqua. Dist., fl. 3 i.
Fl. Ext. ergotæ, fl. 3 i.
Fl. Ext. digitalis, fl. 3 i.
Fl. Ext. gelsemium, fl. 3 i.
Elix. glycyrrhiza, q. s. ad fl. 3 iv.

M. S. Teaspoonful between meals and before retiring.

The catarrhal form is more difficult to control than the congestive, owing to involvement of the ducts and follicles, which are exceedingly difficult to reach with remedies, and the danger of calcareous degeneration of their secretions.

In addition to the general tonic treatment I have suggested, we will find in this form beneficial results from the use of iodide of

potassium internally, combined with the external use of Tr. of iodine along the perineum. But it must be remembered that owing to the preponderance of fibro-muscular tissue in comparison with the purely glandular structure, we do not get as decided advantages from the use of iodine and its compounds as we do in the enlargement or inflammation of purely glandular structures.

In addition to general constitutional treatment, a line of local treatment should be promptly instituted in this form of disease, which would secure as nearly as possible the discharge of all the semi-solid secretions which block up the ducts and thus interrupt the healthy action of their follicles, and which will at the same time stimulate them to healthy action.

This can be aided very much by the use of a solution of biborate of soda, used with a prostatic syringe, which aids in dissolving the thickened mucoid discharge, and thus facilitate its more rapid escape. Finely powdered borax, or the impalpable powder of boracic acid, applied along the prostatic urethra, will not only favor the discharge of this thick secretion, but act as a gentle stimulant to the diseased ducts and their follicles.

If a more decided stimulant is desired, a mild solution of argenti nitratis of five or ten grains to the ounce, may be applied, with the porte caustique, or the parts dusted with iodoform, or covered with the balsam of Peru, but none of these should be applied unless there is pretty positive evidence that the mucoid discharge has been pretty thoroughly removed first, in order to permit direct contact with the diseased parts of these latter remedies.

Occasional kneading of the gland through the rectum will not only aid in emptying the engorged ducts, but act as a gentle stimulant to the gland itself.

Where there is hyperæsthesia of the nerves supplying the gland, and thus keeping up through sympathetic irritation a constant desire to copulate, or inducing frequent nocturnal emissions, I have never found anything which gave me such prompt relief as the use of carbolic acid applied with the porte caustique along the prostatic urethra.

Sometimes a single application combined with tonics, sedatives, or alteratives, as the case may demand, will be sufficient, but if not a few at the most will serve to control the difficulty.

The use of suppositories containing suitable remedies applied with Harrison's proateremede

will be found very beneficial, especially if introduced shortly before the patient retires.

The use of cold in the form of ice filled into an eyeless catheter (gum prepared) and introduced into the bladder and allowed to remain for a few minutes, is often serviceable in relieving the irritation.

The use of electricity may be of some service, although it is questionable whether it has any advantages over the remedies above mentioned, and it is a remedy we must use with care lest we induce other troubles such as neuralgia of the testicles, or even suppuration of the same, or induce inflammation and cause it to extend along the urethra and thus complicate our trouble, rather than relieve it.

In addition to all these remedies, the hygienic surroundings of the patient demand the careful attention of the surgeon in every particular, but especially should the skin be kept healthy, the diet judiciously guarded in order to avoid if possible any bowel complication, and last but not least the general habits of the patient directed in a line of moderation in all things.

Lecture on General Dermatological Diagnosis.*

BY GEORGE THOMAS JACKSON, M. D.†

GENTLEMEN:—By some authors dermatological diagnosis is said to be very easy; others say it is very difficult. Do not let the dictum of one side lead you into the slovenly methods of not a few physicians, who place all the hundred and more diseases of the skin under the two headings of syphilis and eczema, and treat them with mercury, arsenic and oxide of zinc ointment. Nor should you be disheartened by the dictum of the other side, for when you have once mastered the main diseases of the skin, the others will easily come to your knowledge by practice.

You have done very wisely to avail yourselves of the facilities for observation which only a large city can afford, because to learn our specialty many cases must be seen, so much in the diagnosis of skin diseases depends upon the general make up of the disease, little points in the way of color, location, configuration, etc., which cannot be well described. It is a good thing, first of all, to master the lesions of the skin. After you have once familiarized yourselves with

skin diseases, you will, probably, not stop to think whether a given one is papular, vesicular, pustular, or not, but will name it from its physiognomy. Nevertheless in doubtful cases the recognition of the most prominent lesion will aid you in diagnosis; and, in describing a case, time will be saved and clearness gained by using the proper phraseology.

The lesions of the skin have been divided into two classes, namely: primary and secondary. The primary lesions are the macule, the papule, the vesicle, the pustule, the bleb, the wheal, the tubercle, and the tumor. The secondary lesions are the crust, the scale, the excoriation, the fissure, the ulcer, and the cicatrix. In running its course, whether uninfluenced or influenced by treatment, almost every disease of the skin exhibits more than one lesion, and we can only speak of it as a macular, papular, or other disease from its most prominent and characteristic lesion.

A macule is a spot or stain in the skin which is not raised above the surface level, which may be of any size from a pin point up to the palm of the hand or larger, and of any color from white to black, according to its cause. It is due to hyperæmia, as in erythema simplex, to inflammation as in eczema and erysipelas, to a deposit of pigment, as in freckles and chloasma, to a parasite growth in the skin, as in chromophytosis, tinea, or pityriasis versicolor, to a hemorrhage into the skin as in purpura simplex, or to a staining of the skin as from iodine. The principal macular diseases are chloasma, erythema simplex, lentigo, morphea, nævus simplex and spilus, purpura, scleroderma, chromophytosis, vitiligo, xanthoma, xanthelasma, melasma, leukopathia.

The macule may be evanescent or permanent; may remain as a macule during its existence or may give place to a papule, vesicle, or pustule. It is the simplest of all the lesions of the skin, and is met with as a primary lesion of many of its disorders.

The papule is a circumscribed elevation of the skin, in size varying from a pinhead to a split pea; of various colors, most generally some shade of red; and firm to the touch. It is acuminate, rounded, flattened or angular in shape. It is sometimes inflammatory as in eczema, it is sometimes due to an hypertrophy of normal structures, as in the papillæ of warts; sometimes the heaping up of epidermic cells about a hair, as in the lichen pilaris, will give rise to it, and sometimes an effusion into the skin as of blood in purpura

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or of serum as in papular urticaria will cause it. The acne papule, comedoe, and milium are illustrations of papules due to retention of sebaceous matter.

The papule may remain as such throughout its course, and finally be absorbed, or it may change into a vesicle or pustule, or soften and break down. The papular diseases have received the name of lichenoid diseases, and the various lichens are the types of the disease. Thus we have lichen simplex (now called papular eczema), lichen tropicus (prickly heat), lichen strophulous (tooth-rash or gum), lichen ruber acuminatus and planus, lichen scrofulorum or scrofulosus, lichen pilaris or keratosis pilaris, and lichen urticatus or papular urticaria. Besides these, other papular diseases are comedoe, erythema papulatum, lupus, prurigo, and psoriasis.

Like the macule, the papule is met with in the course of many diseases which cannot be classed as papular, as in syphilis, scabies, etc. As a rule, papular diseases are itchy, and often they are scaly.

The vesicle is a circumscribed elevation of the skin, which contains fluid. In size it is from a pinhead to a split pea; in shape pointed, rounded or flattened. Its color varies. When only serum is present, it is crystalline, but as the serum becomes mixed with purulent matter or blood, it will become opaque or of different shades of color. As a rule, vesicles are superficial elevations of the epidermis, and readily rupture and pour out their contents upon the skin to dry up into light yellowish crusts. Sometimes they are below the mucous layer of the skin, and sometimes they do not rupture, but are absorbed. They are in most cases inflammatory as in eczema; but in sudamina they are due to retention of sweat. They either remain as vesicles or becoming purulent change into pustules. They are discrete or form patches. The vesicular diseases are eczema, herpes, sudamina, and dysidrosis. Dermatitis from rhus poisoning is also vesicular, as is ringworm in certain stages. The vesicle is a more distinguishing diagnostic landmark than the papule or the macule.

The pustule is a circumscribed elevation of the epidermis which contains pus. In size it runs from that of a pinhead to that of the nail. Its form may be round, flat, acuminate, or umbilicated. Its color is usually yellowish, and opaque; but if it contains blood with the pus it may be brown or reddish. It either originates as a pustule or develops from a

vesicle or papule. Usually it soon breaks down and discharges its contents upon the skin, which drying forms a yellowish-green or greenish crust, the color running to blackish according to the amount of blood which may be present. Around the pustule there is often a well-marked inflammatory areola. They are discrete or confluent. They differ from vesicles mainly in the character of their contents. Sometimes if situated deeply in the skin when they break down they leave scars. Pustules are found in many diseases, but are characteristic of impetigo simplex and contagiosa, ecthyma, acne and sycosis.

The bleb may be defined as a large vesicle of irregular shape and with clear or opaque contents. Its size is from a split pea to a goose egg. It rises up suddenly, has a slight or no areola, is either fully distended or flaccid, and does not rupture easily. It either begins and ends as a bleb as in pemphigus, or it is formed from the coalescence of two or more vesicles. Pemphigus is the only purely bullous disease, but bullæ are met with also in erysipelas, herpes, dermatitis, and rarely in syphilis and leprosy. They are occasionally seen in eczema.

The wheal is an evanescent, round, oval or elongated elevation of the skin, of a pinkish or whitish color, which is more or less firm to the touch. Around it there is generally an areola. In size sometimes they are as small as a pea, sometimes as large as the palm of the hand. They appear suddenly and disappear quickly in the course of a few minutes, rarely hours. They are due to a spasm of the capillaries and an effusion of serum into the meshes of the skin; the raised spot having the fluid under it and being deprived of blood, while the areola about it shows the site of the congested blood vessels. The wheal occurs only in urticaria from internal causes; it may be produced by striking the skin with the common stinging nettle, or by any sharp traumatism in those who are predisposed to urticaria.

The tubercle may be thought of as a large papule. It is a circumscribed elevation of the skin varying in size from a split pea to a cherry. In its general characteristics it resembles the papule, only it is larger and extends deeper into the skin. Tubercles may be absorbed and disappear; or they may break down and ulcerate and leave scars. Sometimes they remain permanent, as in molluscum. They are met with in many diseases during their course, but may be considered as

being peculiarly distinctive of carbuncle, epithelioma, erythema nodosum, keloid, leprosy, lupus vulgaris, molluscum sebaceum and fibrosum, syphilis, tinea barbæ (sycosis parastitica), xanthoma, and rhinoscleroma.

The tumor is a new growth which appears as a more or less prominent lump under or upon the skin. It may be of any size. It may lie deep in the subcutaneous tissues or it may be pedunculated. Many of the tumors which occur elsewhere may affect the skin, such as epithelioma, fibroma, sarcoma and the like. Tumors are also met with in scrofula and syphilis.

Such are the primary lesions of the skin. The secondary lesions do not require any extended description as they are familiar to you. But it is important that you should differentiate between the *crust* and the *scale*, two lesions that are often confounded. A crust is formed by the drying of some secretion or exudation upon the skin; while a scale is a dry, laminated mass of epidermis which has separated from the tissues below, the product of imperfect or perverted nutrition. Thus, in eczema vesiculosum when the secretion dries upon the skin we have light yellowish crusts, while in eczema squamosum in which the horny layer is not perfectly produced we have thin scales. In some cases the crusts are very thick, and their color will vary from light yellow to dark green or black according to the admixture of blood, pus, and extraneous matter such as dust and dirt. Scales may be very scantily formed or may be abundant and heaped up into thick masses as in psoriasis. They are whitish or grayish, yellowish or dirty yellow. Both crusts and scales occur in many pathological conditions. Crusts are specially characteristic of ecthyma, some forms of eczema, impetigo, and seborrhœa. Scales are peculiar to dermatitis exfoliativa, pityriasis rubra, pityriasis simplex, psoriasis, ichthyosis, and the lichens.

Excoriations are familiar to you as scratch marks, and are superficial denudations of the skin. They are of value in informing us whether an eruption itches or not, as scratching is their chief though not their only cause. When we meet with minute excoriations scattered over a part we have to determine whether the disease is a papular eczema, a pruritus, an urticaria, a prurigo, scabies or lice. If the excoriations have a more or less distinct circular outline, they probably represent torn vesicles or pustules, and the disease is either a vesicular or pustular eczema,

herpes, impetigo, pemphigus, or scabies. When scratching has continued for some time and the skin has been frequently torn, we often meet with pigmentation. Excoriations rarely leave scars.

Ulcers are irregularly shaped and sized losses of substance. They do not belong exclusively to the domain of dermatology. Sometimes they are quite small, but may reach enormous size. Sometimes they are shallow, sometimes deep, sometimes excavated, sometimes scooped out. Their edges may be undermined, or everted, as in epithelioma, or sharp cut, as in the "punched-out" ulcer of syphilis. Their secretion may be scanty or abundant. They are usually chronic in their course, show slight tendency to heal, and are painful. They are met with as the result either of some painful skin lesion, or of some injury. They occur in many forms of cancer, in chancre, chancroid, lupus vulgaris, syphilis, scrofula, eczema varicosum, and sometimes with herpes zoster, ecthyma, dermatitis and antecedent pustular eruptions. They always heal with a cicatrix.

Cicatrices or scars represent the effort of nature to heal a deep loss of skin tissue by the formation of connective tissue. Any disease or injury which has destroyed the papillary layer of the skin, will leave a scar. It is a conservative effort of nature, but the tissue formed is devoid of the elements of the normal skin. Some scars are depressed, as those of small-pox, some raised and puckered, as those of lupus, some smooth and white, as of syphilis. When first formed they are of a bright pink or red color, which in course of time fades out and grows whiter. The deformity which they cause will also often grow less by the influence of time.

But there are other elements entering into the diagnosis. We are guided sometimes by the characteristic location of an eruption. Upon the face occur with special frequency acne, comedoe, chloasma, eczema, epithelioma, herpes, lupus, milium, rosacea, seborrhœa, and sycosis. On the scalp we frequently meet with eczema, pediculosis, seborrhœa, trichophytosis, favus, and alopecia. On the chest acne, chromophytosis (tinea versicolor), molluscum, keloid, macular syphiloderm, and zoster are perhaps the most frequent. The back gives special lodgement to acne, carbuncle, and sebaceous cysts. Upon the abdomen we find lichen ruber acuminatus and lichen scrofulosus, miliaria, scabies, pediculosis corporis and pubis, sudamina, macular

syphilides, and zoster. The extensor surface of the forearms and wrists is the favorite site for erythema multiforme, while upon the flexor surface lichen ruber planus occurs. Psoriasis affects the extensor surface of the elbows and knees, while eczema seeks their flexor surfaces. Upon the legs the various forms of purpura occur, as well as erythema multiforme and nodosum. As a general rule it may be stated that psoriasis affects the posterior and extensor surfaces of the body, while syphilis affects the anterior and flexor surfaces.

The color of an eruption is another element in diagnosis. Thus we have the raw ham color of the syphilides, the brilliant red of erysipilas and erythema, the inflammatory red of eczema, the dark red of purpura, the bright red of psoriasis, the brown of pigmentary deposit, et cetera. Yet another element is configuration, as shown by the circular outline or scalloped edge of syphilis, the round patch of trichophytosis and alopecia areata, the peculiar map-like border of large patches of psoriasis, the oval or egg-shape of the lesion of erythema nodosum, et cetera.

The presence or absence of itching is another important guide. It is always present in eczema, pruritus cutaneous, urticaria, pediculosis, scabies, and prurigo; almost always in eczema, lichen, and trichophytosis; and generally in seborrhœa and psoriasis. Absence of itching is on the other hand a characteristic of syphilis; though in some rare papular syphilides it is met with. The other subjective symptoms such as burning and pain are not so reliable, though the latter is usually pronounced in zoster and epithelioma. In some doubtful cases the microscope is to be appealed to for decision; and as it is chiefly in the diagnosis between parasitic and non-parasitic diseases, it is well early in your career to familiarise yourself with the appearances presented by the fungi of trichophytosis and favus. If you are a skilled histologist you will have a field before you in the question of the relation between lupus and tuberculosi.

Such, then, are the chief foundation stones upon which the structure of dermatological diagnosis is built, and I believe you will do well to familiarise yourselves with them at the beginning of the course, that you may gain a more perfect knowledge from the cases as they come before you.

The Relation of Sore Throat to Diphtheria.*

BY DR. W. R. CHITTICK.†

FOR many months past diphtheria has been prevalent in this city. Many of the cases reported as diphtheria may not have been such, but the number of deaths reported place beyond question the fact that we have had many cases of this disease in our midst.

Those who have been called upon to treat patients with throat troubles, must have noticed, during all this time, the great number cases of acute catarrh of the pharynx, or ordinary "sore throat," acute tonsilitis and croupous, or pseudomembranous sore throat. This latter is often mistaken for diphtheria, and it is to the relation of this condition to diphtheria that I wish to call your attention.

When called to a case and on examination we find a patient suffering with any form of throat trouble, we should make a careful diagnosis. A line of treatment that would be indicated in the milder conditions will fall far short for the graver. That the milder diseases are purely a local trouble, and should be treated as such, and that the graver trouble is a constitutional disease, the exudation being a local manifestation, as well as in the vast majority of cases, the entering of the specific poison. These diseases are more closely related than we think for, and, while not being, by any means, an unist, I believe the pathological conditions, up to a certain point, are the same. In order to understand this clearly we must consider the changes that take place in the normal tissues. The most important tissue involved is the epithelial. This is such an important factor in these diseases that it merits a careful study.

The function of the epithelium is such a complicated and active one that we do not always realize the important part it plays in the different diseases. In the intestinal tract, for instance, it is epithelial cells that secrete the gastric juice, that manufacture the other digestive fluids, and, that finally determine what part of the digested mass that passes over them shall be taken up and carried, after being further modified by other epithelial cells, into the general circulation of the blood, and by this tissue to the different parts of the body to make up for the loss that is constantly going on there.

In the respiratory tract we have the epithelium performing just as great an office in another

* Paper read before the Detroit Academy of Medicine.

† Pathologist to Harper Hospital.

er way. The first great office of the tissue is to protect the parts upon which it lies, and this it does in several ways, by secreting a fluid which keeps the parts moist, by aiding with its cilia the passage of air to the smaller portions of the lungs and foreign bodies to escape or reach a part where they are expelled by coughing, etc. These epithelial cells, not being supplied by blood-vessels, must also supply themselves with nutriment by absorption. Consequently, when the system is in a debilitated state, and the blood in a condition incapable of supplying it with sufficient nourishment, it becomes weakened; and when it is further beset with an external irritation, such as is met with in all throat affections, it is compelled to yield in spite of its heroic resistance.

When persons, especially children, are not in a perfectly healthy condition, and, furthermore, when they have been exposed to sudden changes in the atmosphere and "catch cold," there is a catarrhal condition set up which produces the first condition of sore throat or of diphtheria.

Hyperæmia, with all the attending conditions of inflammation, then sets in. During this time the epithelium is striving to keep the tissues in a normal condition, but if the irritation proves to be too great, it is overpowered, and instead of a mucous, we will have a fibrous exudation. The extent of this exudation will depend entirely upon the amount of irritation. Some persons are more susceptible to the different irritants than others. What one will resist, others will succumb to. I have frequently seen this happen in families in which one or two of the members would have diphtheria and all the others escape.

But the point I wish to reach is this, that ordinary sore throat, croup, and diphtheria are related to each other, and that, generally, we must have the first condition before we can have the other two.

In the first place, there must be a lesion. There may be a condition existing of the tissue predisposing to these ailments, or one may be exposed to cold and damp air which, chilling the external part of the body, will produce an internal congestion, often in the throat, larynx and trachea. External irritants and poisonous gases may do it, or the lesion may be caused by the condition of the throat in scarlet fever, measles or whooping-cough. If the irritant attacks the larynx or trachea, and the disease gets beyond that of a catarrhal character, we have a mucous mem-

brane deprived of the protective influence of its epithelium, and, consequently, the irritation being very great, we will have an exudation formed on the parts which, exposed to the constant current of air passing over them, become somewhat dry and toughened, and being constantly added to from beneath, become very thick. This, in children, is a very serious matter, as it occludes a naturally small passage. This is what we term true croup. If the same conditions were to take place in the upper part of the throat, it would be a croupous pharyngitis. Indeed, I saw a young man, a few months ago, in whom the whole pharynx, tonsils, uvula, and roof of the mouth were in this condition, and still he did not apply for medical aid until the seventh or eighth day. If it had been diphtheritic membrane, it is doubtful if he would have recovered. And all this time he eat his meals and worked about his father's place of business.

I believe that diphtheritic membrane is, in the beginning, the same as croupous membrane, but is different in this, that it absorbs or rather allows to enter, a specific poison, which being a far greater irritant, produces the peculiar condition we get in diphtheria. I do not believe that bacteria or micrococci *per se*, constitute the disease, although they may convey the poison. It is more likely to be in a gaseous form.

I can recall a number of cases in which I do not believe the patients would have taken the disease, had their throats not been in a condition to receive the poison.

The blood must be in an abnormal condition to be poisoned by any of these diseases. If one is quite healthy and the irritation is great, perhaps he will escape with a light attack or with a sore throat, with no specific element in it. Then again, others, with exposure to the mildest of cases come down with a severe attack of diphtheria. Or one may have a severe and extensive catarrhal condition of the pharynx and posterior nares, and happen to come in contact with the specific poison of diphtheria, and come down with the severest form of the disease. It is in this same way that it follows in scarlet fever, measles and whooping-cough. I believe we could produce any number of cases of diphtheria in debilitated persons by producing a lesion through the medium of irritant vapors, and by afterwards exposing the patients to diphtheritic poison. In some the poison itself is irritant enough to produce the lesion.

We may have croupous inflammation in various parts of the body. So may we have diphtheritic inflammation in the same parts, under the same conditions if the "diphtheritic poison" gain access to them. But before either there is a catarrhal condition. It is well-known that if a patient has a lesion of the skin he can be inoculated with the diphtheritic poison, and a membrane will form on it the same as on a mucous membrane. The respiratory apparatus coming first in contact with the poison, is the first to suffer, hence we have the disease manifested here in the vast majority of cases.

A Case of Alopecia Calva.

BY T. CURTIS SMITH, M. D.

IN December, 1882, a case of this disease came under my notice. At that time a few hairs yet remained on the scalp and dorsal surfaces of the fingers. These gradually fell out leaving not a single hair on the body, extremities or head. The subject was a lad about fifteen years of age, of previous good health. Two years previous, *i. e.*, in 1880, his hair begun to fall off the scalp, disappearing first off the crown and parietal surfaces; then it disappeared from the occipital surface last of all. Meanwhile the eyebrows and lashes, hair from the fingers, toes, legs, arms and body all disappeared, until not a hair could be found anywhere on him. His head "where the hair ought to grow" was as smooth as a peeled onion, and no manifestation of skin disease could be discovered, unless we count that a diseased condition of the skin of the scalp, where no hair is present, and not a single sign of a hair bulb could be discovered.

His complexion was light, skin freckled, hair light sandy color. In other respects than the one named, he appeared to be healthy, if we may except the enlargement of a few post cervical glands. His family history was fairly good, except a little inclination to scrofula on the father's side. A possibility of inherited specific taint was suspected, but such history could not be obtained.

In December, 1882, I put him on the use of kali iod. grs. v., with hydrarg. protoiod. gr. one-eighth, three times a day. This was continued about one month, the mercury being omitted after the second week. He then took internally twice a week, full diaphoretic doses of fl. ext. jaborandi, and small doses of it three times a day, for six weeks or more.

Then there was used the tr. ferri chloridi, with hydr. bichlor. and these changed off for the kali iodi., and the whole range of internal remedies recommended for such cases, or rather for common alopecia, arsenic being prominent. Local stimulant applications of hydr. bichloridi in alcohol, of ung. hydr. nitr. of vaseline, jaborandi, quinia in whiskey, free brushing, cold and hot applications, and various other remedies have been persistently used, but with no appreciable effect.

At one time a few little hairs, white, and very fine, sprung up, giving a lively hope of a good result. But these perished like grass in desert sand. A very few of these can now again be seen on his scalp, but for months no other growth has been or can now be discovered. In over twenty-two years of practice I have not met as complete a case of this affection as this one.

Dr. Juler, of Cincinnati, in the *Lancet and Clinic*, June 21, 1884, p. 758, mentions a case quite similar to this one, and also "an entire family" that were thus afflicted. In this instance in my practice, the other members of the family were not affected.

The treatment was of no avail whatever for his relief.

A Woman Doctor.

I met a lady yesterday,—
A would-be old M. D.,
And I said, "If I were sick
The like should never doctor me."

She looked like some old spinster
Who was trying to be a wizard,
And didn't know the difference
Between a liver and a gizzard.

Her nose was mighty long,
And her mouth was very big,
While on her old bald head
She wore a faded wig.

Her eyes were green and yellow,
While her ears flopped in the wind,
And her teeth were out in places,
Which looked horrid when she grinned.

She was fearful tall and crooked,
And sort of lumpy in her walk,
While it would scare the bravest native
Just to hear the old thing talk.

I ventured to ask the question:
Why *she* learned to peddle pills,
And strived to cure the natives
Of their constitutional ills.

Said she, "I failed to marry
At the proper marrying time,"
And *that* accounts for wandering
From a woman's *usual* line.

Why some women are so anxious
To change their natural plan,
And contradict their Maker
By trying to be a man,

Is more than I can answer,
And the reason so remote
We could just as *easy* tell you
When a pig becomes a shoat.

—Anonymous.

MANSFIELD, O., Aug. 1, 1884.

Proceedings of Societies.

Detroit Academy of Medicine.

MARCH 11, 1884.

The Academy met at the office of Dr. Noyes, Dr. Bradley occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Wilson read an inaugural paper pointing out the contrasts which exist in etiology and in natural history between laryngeal diphtheria and membranous croup, and emphasizing the distinction that should be made between the two affections in their rational treatment.

On motion of Dr. Gilbert, a discussion of the subject of this paper was made a part of the order of business, for the meeting to be held two weeks from this date.

PREVAILING DISEASES.

Dr. Chittick reported tonsillitis as prevalent and fashionable; had seen some cases of measles, and a good deal of whooping cough.

Dr. Maire also mentioned tonsillitis.

Dr. Gilbert remarked on the prevalence of diseases affecting the mucous membrane. Scarlet fever, although quite prevalent, has been of a very mild type.

Dr. Bradley: In Hamtramck there is quite an epidemic of measles. The disease is generally of a mild character, although I have heard of one case of death from intercurrent pneumonia.

D. Wyman: I have seen a number of cases of diphtheria, lately.

VERBAL COMMUNICATIONS.

Dr. Maire: A case of some interest is that

of an old Scotch lady, from whose nose I have twice removed a polypus. Before she came to America, she had a similar operation performed eleven times, and since coming here the growth has been removed no less than ten times. The polypus has been in each instance of about the size and shape of a penny. During pregnancy the tumor does not grow. She says that her mother had a tumor as large as a hen's egg, in the pharynx.

Dr. Wyman read notes of a case of senile gangrene, in which about two weeks elapsed before the line of demarcation was drawn.

Dr. Gilbert: In a case of this kind, when would you advise amputation?

Dr. Wyman: As soon as the line of demarcation is distinctly formed. I should expect that this would take place generally within a very few days after the occlusion of the artery, but in the case just related, the time was considerably more.

In this, as in another case that came under my observation, the striking feature was exquisite tenderness, superficially, in portions of the limb.

Dr. Bradley: It seems as though the time which would elapse in such a case before the line of demarcation is formed would depend much upon the location of the occlusion. If low down in the artery, the limb would obtain a partial supply of blood from anastomosing vessels, whereas, if high up, the supply would be almost wholly cut off at once.

The only case of gangrene which I have met with in my practice, was that of an old lady, in whom all the arteries were in an atheromatous condition. She lived five days.

Dr. Gilbert: Several years ago I saw a case where both limbs were affected, gangrene extending as high as the knees. In this case it was several weeks—possibly even months—before the line of demarcation was distinctly formed.

Dr. Yemans: I recently had a case of gangrene of one foot. The patient lived three weeks. There was a well-defined line of demarcation. I declined to make an operation.

Dr. Yemans described a case under his care, of an inflammation in the sacro iliac synchondrosis. The man has been under treatment two years for "spinal disease," but I do not find that the spinal column is implicated in the disease. There is no paralysis; no loss of co-ordination. The man lies on his side with the limbs drawn up to try and obtain relief from pain in the hip. The man

is a sail-maker by trade. The trouble may have begun in the coccyx, but there is not now any coxalgia. What I would like to inquire is, whether it would be wise to put on a bandage of any kind. I do not myself see how any mechanical appliance can be devised which will be of any service. The patient has been treated by counter irritation, by electricity, etc., etc.

Dr. Gilbert: I have sometimes made out a diagnosis of rheumatism by observing whether a patient who cannot move himself can tolerate passive motion.

I have a case which I will present for a diagnosis. The patient is a man sixty years old; has been for a long time under treatment. Is feeble, but can walk, although with difficulty. He keeps the house the most of the time. He has been dyspeptic, but this trouble has been corrected. . Urine normal. Is depressed at times in mind. Drags his left limb in walking, and I find that the tendon reflex in this limb is diminished. He has been a man of temperate habits, although he owns to former sexual excesses. He is fond of books, but his mind is giving way. The arms are not paralyzed, but feeble. There are no signs of syphilis. The symptoms have come on gradually.

Dr. Wyman suggested that there might be a paresis dependent upon derangement of digestive functions.

Dr. Gilbert expressed his own opinion that it was a case of multiple sclerosis. Does not regard it as progressive paresis in the sense in which that term is now commonly applied. He recalled a similar case which he had seen some years ago, in a patient who had the bronzed skin of Addison's disease, and who became gradually parietic and insane.

Adjourned.

March 18, 1884.

The academy met at the office of Dr. Cleland, Dr. Bradley occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Cleland, as chairman of the committee appointed to collect observations on the action of mercurials in the treatment of diphtheria, made a report giving details of a number of cases.

DISCUSSION.

Dr. Wyman: I have been interested in the reading of the paper. I think I can endorse the verdict of the committee in favor of mercury as a remedial agent in diphtheria. Since

the appointment of the committee I have had several cases of this disease in Redford, which I intend hereafter to report in full.

Dr. Maire: I think that in ordinary cases of diphtheria, the old mode of treatment by chlorate of potassium and muriated tincture of iron, will show as good results as the mercurial treatment, but in the laryngeal form of the disease this old method is ineffectual, and in these I should employ mercury.

Dr. Gillett: I have not had any extended experience in the use of mercury in diphtheria. I should have regarded the remedy as contra indicated in a disease so peculiarly depressing in its character. My treatment has always been eminently supporting, while we are taught to regard mercury as a depressing remedy. I think, however, that I should give calomel a trial if I had a case of laryngeal diphtheria.

Dr. Gilbert: My cases of diphtheria have all been treated in the ordinary way. The most remarkable thing in the cases that have been given to-night, is that calomel given in large and repeated doses to a patient suffering from diphtheria, does not produce its usual cathartic effect. Authorities of late have discouraged the use of mercurials in diphtheria; but experience seems to show that in laryngeal cases particularly, the remedy does produce beneficial effects.

Dr. Robertson: I have fortunately had no cases of diphtheria this winter in my own practice. I have seen some cases in consultation. I have seen several hundred cases of what I call membranous sore throat. I have not used calomel in any case except as a cathartic. I make use, however, of a remedy somewhat resembling calomel in its action, viz., the iodide of ammonium. It will remove the membrane in two or three days. I have never had a case of what I call true diphtheria, although I have had 15 or 20 cases of the 18th St. diphtheria, of which we hear so much. I should hesitate to try such large doses of calomel in laryngeal cases not certainly diphtheria. I find I can loosen up any membrane on the tonsil in a short time, with the iodide of ammonium. I give one to seven grains every two hours. It produces a copious fluid secretion from the nose and throat, which washes off the membrane.

In the cases which I call membranous tonsillitis, the membrane does not spread from the tonsils. The disease is not contagious or infectious, although several members of a family often have the disease at the same time. It is an exudative inflammation.

Quinsy is a suppurative inflammation of the tonsil. A third affection, which is also very frequent is follicular tonsillitis. Without formation of a membrane diphtheria cannot be diagnosed with certainty, unless followed by paralysis, and even this may be a sequel of some other affection. I think that in a severe case of laryngeal diphtheria I should try large doses of ammonium iodide. Bartholow recommends tincture of iodide, five drop doses, with carbolic acid, to prevent absorption of diphtheritic poison and as a prophylactic against septicæmia.

The iodide of potassium has an action similar to that of the ammonium salt, but the former is depressant while the latter is stimulant. I frequently combine with the ammonium iodide, the still more stimulating ammonium carbonate.

Dr. Yemans: I have tried the mercurial treatment only in two cases. In one I used the mild chloride, in the other corrosive sublimate. Both patients died.

Dr. Noyes: This treatment of diphtheria with large doses of calomel is to me a new thing. Calomel was given thirty years ago in croup, but not in these heroic doses. We should keep in mind that presence of a membrane does not constitute diphtheria. Patients die without the formation of any membrane. Calomel is not the only remedy which causes discharge of the membrane. It seems to me that the cases that have been reported require a closer analysis than has been given them. In some calomel was used, in others the corrosive sublimate, and in others the remedies were alternated, or the one was substituted for the other apparently without any particular reason. The general condition of the patient is not always stated. Some patients will recover under almost any treatment, and some will die in spite of anything we can do.

In some of these cases oil of eucalyptus or vapor of slacking lime was used. It seems to me that we cannot, therefore, draw final conclusions from these cases. From all that I am able to learn, the plan of treatment which was recommended twenty years ago, relying upon chlorate of potassium, tincture of iron, and whiskey, with supporting measures, is to-day more successful than any other.

Dr. Clark: I have been accustomed for many years to rely upon the remedies that have just been named, adding to the list quinine, and until recently I have felt no inclination to change my practice. When I first tried calomel, I used it in too small doses, and

I was not favorably impressed with the results of the treatment. Recently I have employed the remedy in some laryngeal cases, using it in large doses, and with marked success. I do not consider the remedy appropriate in other cases. In only one of my cases was there much purgation.

Dr. Connor: I have only a single suggestion to make. Jequirity, a remedy which has come to be used a good deal of late in the treatment of the eye, seems to produce its effects by virtue of an organism which develops in the infusion of the beans. The activity of the infusion is completely destroyed by adding to it one twenty-thousandth of corrosive sublimate. In this way we are able completely to control the action of the remedy. It strikes me that something very similar to this may explain the action of mercurials in diphtheria. I am convinced that mercurials are of great value, not only in syphilis, but in a great number of acute diseases, which formerly were treated in the routine method, with blue pill or calomel, successfully.

Dr. Chittick: The cases reported by the committee, of which I was a member, were all certainly true diphtheria. We found that calomel would not always be tolerated, and for that reason sometimes substituted corrosive sublimate. On the whole, our most favorable results were obtained with calomel, but it took me a good while to learn how to use the remedy. I was at first disposed to give it in too small doses, and not frequently enough repeated. The interval between the doses should not exceed one hour in severe cases.

Dr. Maire: Nothing has been said about salivation. In one case in which I gave corrosive sublimate in doses of $\frac{1}{4}$ grain, four days, my patient was severely salivated.

Adjourned.

March 28, 1884.

The academy met at the office of Dr. Connor, Dr. Bradley presiding.

WRITTEN COMMUNICATIONS.

Dr. Wilson read a synopsis of his paper on the relation of membranous croup to laryngeal diphtheria, introducing a discussion on this important subject.

DISCUSSION.

Dr. Andrews: This subject has been somewhat recently discussed in the academy. The profession are still divided in their views as they were at that time, and I do not know

that any new arguments of weight have been adduced since then on either side. My own experience and observation lead me to accept the view that the two affections are distinct. The reason why so many physicians in the large cities ignore the existence of membranous croup as a distinct disease, is probably because many of them see none but diphtheritic cases. In some localities probably true croup is quite unknown, and it is, fortunately, everywhere a rare affection. Cases of true croup make their appearance at times and in places where there is no diphtheria. The course of the disease is unlike that of diphtheria. In the latter there are symptoms of fever preceding the attack, the glands at the angle of the jaw are enlarged, and there is more or less redness and tumefaction of the fauces. There is greater elevation of temperature and more febrile reaction than in croup. True croup is a laryngitis with a membranous exudate. There is no severe constitutional disturbance preceding the development of the characteristic symptoms. At the beginning of an attack we cannot distinguish membranous from spasmodic croup. The history of the attack is identical up to the point when a membrane begins to form, and it is this membrane which constitutes the distinguishing feature of the disease.

I have seen, in my own practice but four cases of true croup. The first case was that of a child ten years old. The patient had been suffering from a "cold" three days before any alarming symptoms made their appearance. There had been no serious constitutional disturbance. When I was called, the membrane was already fully formed, and the critical period of the disease was probably past. Large quantities of membrane, white, fibrinous, not tough or tenacious, were expectorated. There remained a persistent bronchitis, and recovery was very slow.

Another case was that of a young child, who had for several days had a slight cold, and showed a little redness of the throat. Suddenly in the evening the phenomena of true croup made their appearance. I gave an unfavorable prognosis, and made use of all the usual remedies—emetics, saturating the air with vapor, etc., but the child died of suffocation the following afternoon. These cases illustrate the usual history of this malady, and show well the marked contrast between it and diphtheritic laryngitis. The prodromata of diphtheria—the peculiar prostration, the fetor of the breath, all are ab-

sent, while we have in their place a history of some unusual exposure, and a train of symptoms bearing no resemblance whatever to those of diphtheria.

Dr. Connor: I have no personal experience on which to base a judgment in regard to the unity or duality of the two affections under discussion. I think that the weight of authority, however, is in favor of unity.

Dr. Gillett: I have had but one case of true membranous croup.

Dr. Andrews: Dr. Inglis, in his extensive practice, met with only three cases.

Dr. Gilbert: It seems to me that the question of unity or duality receives a different answer largely according to the nationality of the observer. While French writers believe in duality, the Germans and Americans seem to favor unity. We ought to look at the facts themselves, rather than at the opinions of authorities. I have seen one case certainly, perhaps two of true croup, but a physician may engage actively in practice many years, and never, by his own observation gain any knowledge of the disease. I think it is fair to say that where points of dissimilarity are more numerous and striking than those of resemblance, the diseases are distinct. We find, in fact, that the prodromata, the history, and the treatment of membranous croup and laryngeal diphtheria are unlike throughout. The only similarity that exists between the two affections is the presence in both of a membrane, occupying a similar situation. But the character of the membrane itself is different. In croup it is a partially organized structure. It is situated upon the mucous membrane. The diphtheritic membrane is easily broken up; has more the appearance of cheesy curd. It spreads usually to the tonsils and uvula, whereas the membrane of true croup shows no such disposition. There is always erosion of the mucous membrane in diphtheria. The sequelæ, too, are different. Paralysis is never known to follow croup. The treatment of croup, if successful at all, depends upon arresting the formation of membrane. In diphtheria the membrane is of comparatively little importance in the treatment. In the early stages of croup, stimulants would not be given by anyone, but their use in diphtheria is the most important point in successful treatment.

Dr. Maire: I believe I have seen one case of true croup. I incline strongly to the doctrine of unity, from what I have seen and read. Those who have paid especial attention to diseases of the throat hold this view.

Pathologists do not find the alleged distinctions between the membranes of diphtheria and croup. Virchow was at first disposed to regard them as different, but afterwards concluded that the difference consisted in the suppuration which takes place under the membrane of diphtheria. Dr. McKenzie says croup may be sthenic, or otherwise. The difference spoken of in the treatment is not proof that the diseases are radically distinct. In croup the peril of suffocation is urgent. There is no time for support, until these urgent symptoms subside.

I believe that cases of croup originate from exposure to diphtheria, and, *vice versa*, that diphtheria may be communicated by a patient having membranous croup.

Dr. Chittick: I think it is generally admitted that we have membranous sore throats not diphtheritic. Why not then membranous laryngitis not diphtheritic? Croup, as I understand it is produced by violent irritation of the mucous membrane, leading to inflammatory exudation. I believe the connection of these diseases is this: In diphtheria there is a specific germ. Wherever there is exudative inflammation, a soil is provided in which these germs may flourish. A case of croup might in this way become diphtheritic.

Dr. Kinney: I think I have had two cases of true croup. There was no diphtheria in the community at the time. The children had been playing out of doors in spring, and after being kept all winter in the house, the exposure resulted in the attack. There are cases of laryngeal diphtheria, in which no membrane forms in the pharynx. In one which came under my observation, the symptoms at first seemed to be those of quinsy; after three days, however, membrane began to be expectorated from the larynx and trachea. Other members of the family took the disease, which followed its ordinary course.

PATHOLOGICAL SPECIMENS.

Dr. Chittick exhibited a specimen taken from a patient who had died of laryngeal phthisis. The patient was taken six months ago. Symptoms, distress in deglutition and respiration, with abundant discharge of purulent matter. The hyperplasia and engorgement of tissues explains the distress which these patients suffer, and which nothing seems to relieve. The lungs were found in a state of cheesy degeneration. All the upper portion of both lungs had undergone this change, and there were numerous pockets of broken down tissue. These were found to be

swarming with bacilli, although during life the sputa had been frequently examined for bacilli with negative results.

I never knew a case of laryngeal phthisis cured, nor even palliated. Authorities say that much can be done to relieve distress, but I do not find it so.

The patient was 3 months pregnant when taken; had a phenomenally easy labor, three weeks before she died. The condition of pregnancy did not seem to have any influence to retard the progress of the disease, but when it terminated, the disease made rapid progress, as we often observe.

PREVAILING DISEASES.

Dr. Andrews: I wonder whether all members of the academy have cases, such as I find common, of tonsillitis, with follicular exudation.

Dr. Maire spoke of a case he had seen where there was great dyspnoea

Dr. Bradley described one in which the tonsil was completely covered with a membrane, so that he suspected diphtheria, but the patient made a rapid recovery.

Dr. Andrews: In some of these cases there is an appearance very closely resembling actual ulceration. The tissues about the patch of exudate are swollen so that the depressed patch presents exactly the aspect of a true ulcer, but after a few days, as the swelling goes down, the ulcer vanishes.

Dr. Connor: I have seen an unusual number of cases of acute conjunctivitis. I know of no especial cause producing the trouble.

Dr. Gillett announced that he would present at the next meeting of the academy, a paper on "mercury; its physiological and therapeutical action."

Adjourned.

APRIL 1st, 1884.

The Academy met at the office of Dr. Andrews. In absence of the president and vice-president, Dr. Noyes was called to the chair.

VERBAL COMMUNICATIONS.

Dr. Andrews. I had last week an interesting case of diphtheria, in which I tested once more the calomel treatment.

The patient, a child four years old, was taken about ten days ago with a sore throat. On the third day of the attack membrane began to form in the pharynx, and spread rapidly over the fauces and invaded the

nares. I prescribed calomel in four-grain doses every two hours, which was given until the patient had taken about 80 grains. The effect upon the development of the membrane was prompt and gratifying. After twenty-four hours there was no further extension of the membrane, and by the second morning the membrane had begun to loosen around the edges. The throat is now, on the sixth day, completely clear. The calomel produced on the first day one green stool, and on the second and third two. On the fourth day there was no passage, and on the fifth it was necessary to give a dose of rhubarb to secure an evacuation. This was followed by two natural stools. The mercurial produced none of its peculiar constitutional effects.

There was very little general constitutional disturbance accompanying the attack, but the very rapid spread of the membrane induced me to adopt a vigorous treatment. In addition to the calomel, I used a spray of corrosive sublimate 1:1000, thrown into the pharynx and nares.

Dr. Connor: Within the last year I have been observing the effect of iodoform in the treatment of purulent conjunctivitis, and I have been pleased with the remedy. It produces little pain, renders the course of the disease shorter than it would be otherwise. Patients show improvement in two days under its use, and are cured in a week.

Dr. Noyes: I have had some experience in the use of the remedy named, and find it of value. A patient came to me a few days ago with a severe sore throat, and complaining of deafness, resulting from extension of the inflammatory action into the Eustachian tube. His eyes also, were red and congested. I prescribed five compound cathartic pills, and the man reported himself in a day or two as perfectly cured.

Dr. Connor: A case I recently saw, illustrates one common cause of deafness, which physicians frequently overlook, although sufficiently obvious. The patient was a traveling man, generally absent from home. For some time he has been gradually becoming deaf. Occasionally he had a discharge from his ear accompanied with pain. He had been leeches and blistered and purged, all to no purpose. I found the meatus filled completely full of cerumen. When this was removed, the patient found no difficulty in hearing.

Dr. Noyes: I have seen many cases of this kind. They are common.

Dr. Duffield exhibited an instrument for

cutting sections of soft tissues for the microscope, and demonstrated to the academy its operation.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

JUDSON BRADLEY, M. D.,
President.

Proceedings of the Wayne County Medical Society.

DETROIT, August 7th, 1884.

The Wayne County Medical Society convened this evening with the president, Dr. W. Brodie, in the chair.

Dr. Brodie presented a very interesting specimen, consisting of fibroid tumor of the womb, the womb and ovaries which were removed this morning from a patient who had been under the care of Dr. Leonard for some time. The tumor—a fibroid—was developed on the wall of the uterus and weighed, without the womb and ovaries removed with it, eight and a half pounds. The womb was enlarged, and the ovaries were cystic. From each ovary exuded a fluid which in odor and general appearance, strikingly resembles ordinary menstrual discharge; suggesting the possibility of the ovaries being the source of the menstrual fluid.

Dr. Leonard: The patient operated on came under my care about four years ago, is 39 years old, and has two children, aged 7 and 11 years. About five years ago this woman submitted to an operation in Toledo, but the tumor was not removed.

When this patient first came under treatment the uterus was quite irritable, examination usually inducing spasmodic closure of the glottis. In some instances these spasms were quite alarming. Similar spasms are said to occur with the menses. These spasms became markedly less under treatment. The menses at first were regular, but towards the last hæmorrhage became almost constant. While he was unable to attend his patients this woman was under the care of several other physicians.

The treatment was pencils containing ergotin in the womb, tincture of iodine to the os and bromides and ergot internally. Under this treatment the patient improved and her size was diminished for a time, but towards the last seemed useless. The patient's condition becoming deplorable, Dr. McLean was invited to see her.

Dr. McLean: By invitation of the president,

Dr. McLean stated that after careful examination of Dr. Leonard's patient, he had stated that the tumor could be removed, but the operation was serious and nothing could be promised in regard to the results. If the patient and friends requested it under these circumstances he would operate. At the request of the patient and her friends the tumor, womb and ovaries were removed at Harper's Hospital. There was very little loss of blood and the patient bore the operation remarkably well. Rather extensive adhesions were found at the seat of the previous operation, and the bladder was so intimately attached that there was liability of injuring it. Once a portion of it was included in a ligature, but the error was readily detected and obviated. This evening the patient was in good condition, pulse 88 and temperature 99° Fah.

Dr. Wyman saw this case some time ago, and proposed Tait's operation. There was at that time a very noticeable bruit, regarded by some as characteristic of fibroid tumor. A similar bruit was noticeable in a case in which Dr. Webber operated four years ago. The bruit is supposed to arise from enlarged blood vessels. Dr. Wyman asked Dr. MacLean why Tait's operation would not have been preferable to complete extirpation as performed.

Dr. MacLean answered: Tait's operation would have been of little service owing to the cystic condition of the ovaries.

Dr. Brodie: The condition of the omentum in this case might prevent this sound.

Dr. Wyman read a paper on observations on the body of Mr. Phipps, recently hung at Sandwich, Ontario.

Dr. Leonard stated that he had a patient with fibroid tumor under treatment. The patient was about the size of the one from whom the tumor was removed by Dr. MacLean. Her size is decreasing. In many cases ergot, iodine and arsenic will decrease the size of these tumors, and in some cases complete absorption results.

Dr. Noyes cited an instance in which a woman had her first babe delivered by cutting forceps. In the four subsequent confinements delivery was effected by abdominal section, which the woman preferred to the cutting forceps.

Dr. Lyster asked if the Board of Health had any method of removing garbage.

Dr. McGraw said two plans were recommended—depositing it in the river being preferred.

Dr. Brodie considers it impossible to control the garbage question at present. Twenty years ago it secured much attention, but no reliable means has yet been devised.

Dr. MacLean keeps a tame deer and finds it quite efficient.

Dr. Clarke believes there would be serious objections to dumping garbage in the river, in consequence of obstruction to navigation, etc.

W. H. ROUSE, M. D.,

Secretary.

Health in Michigan.

For the week ending July 19, 1884, the reports indicate that diarrhoea considerably increased, that neuralgia, pneumonia, rheumatism, and remittent fever increased, and that influenza and dysentery decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending July 19, were northwest; and compared with the preceding week, the temperature was lower, the absolute and the relative humidity and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was reported present during the week ending July 19, and since, at 6 places, namely, Detroit, Danby, East Saginaw, Grand Rapids, Lansing, and Wyandotte. Scarlet fever at 7 places, Detroit, Elk Rapids, Grand Rapids, Hubbardston, Hastings, Richmond, and Wheatfield. Measles at Detroit and Ludington, and small-pox in Rose Lake township.

The State Board of Health has just issued a document on the prevention of cholera. A copy can be obtained of the secretary, Lansing.

For the week ending July 26, 1884, the reports indicate that cholera morbus, measles, tonsilitis, whooping-cough, and inflammation of kidney increased, and that erysipelas and neuralgia decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending July 26, were west; and, compared with the preceding week, the temperature was considerably higher, the absolute and the relative humidity and the day and the night ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending July 26, and since, at 12 places, namely, Detroit, East Saginaw, Grand Rapids, Howard City, Ishpeming, Kalamazoo, Maple Rapids, McBrides, Monroe, Muske-

gon, North Shade, Portland. Scarlet fever at 12 places, Byron, Charlevoix, Coldwater, Detroit, Elk Rapids, Houghton, Ishpeming, Monroe, Muskegon, Port Huron, Sand Beach, Whitfield. Measles at 8 places, Breedsville, Burr Oak, Detroit, Ishpeming, Manlette, Niles, South Haven and Whitehall.

For the week ending August 2, 1884, the reports indicated that cholera infantum and dysentery increased, and that inflammation of the kidney, neuralgia, influenza and whooping-cough decreased in the area of prevalence.

At the State Capitol the prevailing winds during the week ending August 2, were east; and, compared with the preceding week, the temperature was slightly lower, the absolute and the relative humidity, and the day and the night ozone more.

Compared with the average for the month of July, in the preceding six years, neuralgia, rheumatism, bronchitis and influenza were more prevalent, and intermittent fever, cholera morbus, cholera infantum, diphtheria, typho-malarial fever and dysentery less prevalent in July, 1884.

For the month of July, 1884, compared with the average of corresponding months for the six years, 1879-84, the temperature was lower, the absolute and the relative humidity, and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was reported present during the week ending August 2, and since at 13 places, namely: Alamo, Detroit, East Saginaw, Grand Rapids, Highland, Howard City, Kalamazoo, Manistee, Maple Rapids, Muskegon, McBride, North Shade, Zeeland; scarlet fever at 7 places: Detroit, Elk Rapids, Houghton, Howard City, Muskegon, Port Huron, Sand Beach; measles at 5 places: Detroit, Grand Rapids, Holly, South Haven, Whitehall.

For the week ending August 9, 1884, the reports indicate that erysipelas, typho-malarial fever, inflammation of bowels and neuralgia increased, and consumption decreased in order of prevalence.

At the State Capitol the prevailing winds were north-east, and, compared with the preceding week, the temperature was lower, the relative humidity more, the absolute humidity and night ozone less, and the day ozone the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending Aug. 9, and since at 12 places: namely: Alamo, Detroit, Grand Rap-

ids, Groveland, Holly, Kalamazoo, Leland, Maple Rapids, Manistee, Monroe, Muskegon, Vassar; scarlet fever at 5 places: Columbia-ville, Detroit, Grand Rapids, Jaspar, Muskegon; measles at 6 places: Detroit, Grand Rapids, Kalkaska, Kalamazoo, Ludington, South Haven.

For the week ending August 16, 1884, the reports indicate that scarlet fever and intermittent fever increased, and neuralgia, typho-malarial fever and erysipelas decreased in area of prevalence.

At the State Capitol the prevailing winds were north-west and south-west, and, compared with the preceding week, the temperature was higher, the relative humidity less, the absolute humidity and day ozone more, and the night ozone slightly less.

Including reports by regular observers and others, diphtheria was reported present during the week ending Aug. 16, and since at 8 places, namely: Berlin, Detroit, Kalamazoo, Manistee, McBride, Northville, Pontiac, Ishpeming; scarlet fever at 10 places: Albion, Au Sable, Detroit, Fairfield, Hastings, Hazleton, Kalamazoo, Manistee, Muskegon, Stanton; measles at 3 places: Detroit, Holly, South Haven.

Correspondence.

TO THE EDITOR:

Dear Sir:—I cannot but be surprised at the editorial, reflecting upon me, in the issue of your journal for July. My attention was only called to it this morning, or I should have written earlier.

In the first place, it seems to me an extraordinary thing for one of a Board of trustees, being the editor of a journal, to use the column of that journal to censure another member of the board for honestly trying to do his duty. But I pass over this, simply supposing that those columns will be equally open to my defence.

There are several points in your article which, I submit, place things in a wrong light.

I never had any grievance, or any personal feeling in the matter at all, except so far as I might be held responsible, with the other trustees, for the obligations of the association in the matter of the journal. The president of the board sent to me as he did to you and to the other trustees, a statement, on which he asked our views. I wrote to him,

in answer, an official letter, which I asked him to submit to the other trustees. Of this he had not the courtesy to take the slightest notice—and as the business seemed to me important, I decided, after consultation with some of my friends, to place it before the trustees myself. I also sent copies to a few of the more prominent members of the association. Surely it is an exaggeration to say I “saw fit to present my grievances to the medical profession.”

My idea that the association was in danger of financial embarrassment was based upon the statements made in the official letter of the president of the board.

I never stated myself, nor authorized anyone else to state for me, that the association was \$6,000 in debt. I privately said, as any member of the association would have a right to do, that I feared that such a thing might be. But I publicly stated to the association that this was shown to be a groundless fear on my part.

The statements I did make were on a different basis—they were founded on my own observation, and expressions of my own judgment. I never attacked the *Journal*. My sole idea was to discharge honestly the duty resting upon me as one of the trustees. I did not, and do not think the association had in the *Journal* as then and now conducted such an organ as it ought to have. My voice and vote were frank and consistent in the board, and the minority report which I presented was in accord with my course throughout.

You say that I “was unable to bring facts and figures to show that the *Journal* could be published better at any other place, and with any other editor.” What sort of facts and figures would have shown this? I must confess I do not know. The other trustees were satisfied with the present arrangement. I was not, and nominated another editor. I was prepared with estimates for printing also, as the President of the board knows.

My best efforts were given to advocating the establishment of the *Journal*. Personal interest in it I have none; and I think it hard that you, who know the facts, should hold me up to your readers as discourteous, unreliable in my statements, and unworthy of the trust reposed in me by the association, simply because I dared to have and to express an opinion of my own; simply because I tried to act up to my convictions of my duty as a trustee. I regret that my course has not met with your approval, but my opinions are un-

changed, and I cannot regret having honestly stated them.

Yours, etc.,

JOHN H. PACKARD.

Philadelphia, Aug. 12, 1884.

[We gladly give place to the foregoing letter from Dr. Packard. We regret that his statements do not at all alter one of the facts presented in the editorial complained of in the *DETROIT LANCET* for July, 1884. He admits that he placed his grievances before a few of the more prominent members of the American Medical Profession before he presented them for consideration to the board of trustees of the *Journal of the American Medical Association* at one of its regular meetings. He knew then and he knows now that the presentation of these grievances to the leaders in the profession meant the presentation of the same by the leaders to their numerous followers.

Respecting the statement that the association was six thousand dollars in debt he says that “he publicly stated to the association that this was shown to be groundless on my part.” Hence he acknowledges that he was in error respecting the matter of indebtedness of the *Journal*. If he was in error in this vital point, how shall we know that he was not in error in other vital points, in fact with reference to all his data?

It will be observed that he does not even now present facts proving that the *Journal* can be safely published at any other place than Chicago, or with any other editor.

His remarks about his personal honesty and disinterestedness call for no notice. We never questioned either, nor do we doubt that each member of the board of trustees has an equal amount of the same qualities. We take it for granted that they all possess these qualities of all honorable physicians and true men. We have no doubt that each member of the board has convictions, and is able and willing to act according to the same in all matters pertaining to the *Journal*. That all have been interested in the well-being of the American Medical Association their past record abundantly shows. Hence we are inclined to think that Dr. Packard does not have a monopoly of honest conviction and fearlessness of judgment respecting the *Journal*. The writer claims for himself a right equal to that of Dr. Packard to speak the truth as seems to him wise, just as he accords it to all who differ from him. He regrets that Dr. Packard and other men cannot see all things as he does,

but he does not expect them to do so, and so feels no grievance at expressions of opinion varying from his.

Just here lies the difficulty to which we desired to especially call attention in the editorial alluded to, viz., the honest differences of opinion on the part of their numerous constituency, respecting the management of journals conducted by large associations. We gave a recent instance from the history of the *British Medical Journal* as well as from that of the *American Association Journal*.

How shall such diversity of judgments and convictions be reconciled? Evidently some must yield to others. Who shall yield? Of course each thinks himself right and will seek to make others converts to his views. Hence the conflict.

Each has a right to his own opinions. The writer prefers the evils he knows to those he does not know, while Dr. Packard prefers unknown to present evils. The writer thinks that the interests of the *Journal* would be best subserved by retaining the present management till a better can be found. Dr. Packard wants a change without any certainty of obtaining a better and safer management. If at any time he can demonstrate a safer and better management of the *Journal* in the interests of the entire medical profession, east and west, north and south, the writer will most heartily and cordially co-operate with him in helping to bring about the change.—
ED. DETROIT LANCET.]

CHICAGO, August 20, 1884.

EDITOR DETROIT LANCET,

Dear sir:—In regard to the question raised by Dr. L. L. Holcombe (DETROIT LANCET, July, 1884) it should be remembered that the sexual function is an evolution from hunger, which, as has been pointed out by Dr. Clevenger,¹ was in all probability the primitive desire. Sexual manifestations may be regarded under several types:

1. Normal.
2. Atavistic reversions to primitive conditions.
3. Survivals of tribal or religious ceremonies.
4. Sexual manifestations, the result of imperative conception.
5. Vices, conditions in which sated libertines seek abnormal stimuli for exhausted sexual appetite.

As to the normal manifestations nothing

need be said. In regard to the second type of manifestation, it should be remembered that as hunger was the primitive desire, conjoined sexual appetite and cannibalism are not more than are to be expected, and the peculiar "labio-genital" practice as Dr. — so delicately and expressively puts it, is a survival of cannibalistic sexual practices. The same survival shows itself in the mutilations to which violated females are subjected. The subject of sexual perversion has, probably, been already discussed to a sufficient extent in the LANCET.¹ Pæderasty and allied practices formed a prominent feature of the worship of the sexual organs, for as has been pointed out by Dr. Workman,² religious emotion is often an outcome of erotic states; as Spurgeon (the great Baptist) puts it, "religiosity." The Luni or Pueblo Indians have, as Dr. Hammond³ points out, recognized for centuries pæderasty as a tribal institution; a victim called "meyerado" is chosen, who becomes a person held in a species of honor, but is the passive participant in the pæderasty which forms part of certain religious ceremonies. Old tribal customs like these still remain hidden in the bosom of civilization as types of long extinct animals remain in special districts. Imperative conceptions; those that seize on an otherwise intelligent man and drive him to acts, the wrongful or foolish nature of which he recognises, but which he is unable to control, may take this type. It should be remembered that repeated stimulation tends to exhaust the power of nerves to respond to the normal stimulation, for this reason the sated voluptuary seeks to arouse his flagging sexual system by unwonted stimuli. However, pæderasty, necrophitism (violation of the dead), the genito-labial procedure, cannibalistic violation, etc., are not by themselves evidences of insanity, but may all be simply vices. The circumstances under which these are committed, and the character of the individual committing them, determine whether they are vices or mental perversions. Their sudden appearance in old men (58 to 70) is an outcome of senility, and hence an abnormality, but the appearance of them among what are called "sporting characters," as in the cases recently occurring in Dublin, suggest vice rather than mental abnormality.

Hoping that I have answered the enquiry of Dr. Holcombe, in a fitting manner and to his satisfaction, I remain very sincerely,

JAS. G. KIERNAN.

1. Vol. XII, 1884.

2. American Journal of Insanity, 1863, Vol. I.

3. American Journal of Neurology and Psychiatry.

1. Science, 1881.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Chicago's Waterworks and Stock Yards.

The *Chicago Medical Journal* for August makes a slight exhibit of these wonders of Chicago—the stock yards and waterworks. Many years ago on the occasion of our first visit to Chicago these two great works attracted our attention. The air as it swept to the Palmer House from the stock yards impressed us with the notion that all the sewers of Chicago had suddenly discharged their air into our room. On inquiry we found that this was a common occurrence when the wind came from the stock yards. On inquiring about the vile water placed on the table we were told that when the wind was in certain directions the sewerage of Chicago was carried out to the waterworks crib and thence pumped into the city for the people. With this remembrance we were not at all surprised at the statements made by the *Chicago Journal* respecting the present state of things. It condenses all into the statement, "Lake Michigan is Chicago's wash-pot, her drinking-pot and her chamber-pot." The Chicago river receives most of the sewerage of Chicago. One fork of this receives the refuse of the stock yards. The worst portion of this is for about a mile from the yards. It is from one hundred to two hundred feet wide and from nine to eighteen feet deep. Being wholly unprotected from the sun's heat it seethes and boils when the sun shines upon it like a great cauldron of oil. The mass contained in this river cannot be called water nor ordinary refuse. If it were white it might be called yeast. Its consistency is such that it coats the sides of vessels about an inch in thickness with what is called by the marine men "stock yards paint." The only way of removing it is by taking the vessel to the dry dock and using a steel scraper. Unlike ordinary paint it hastens the decay of the vessel's timber. No living thing can drink this water and live. It destroys grass if poured upon it in large quantities. When diluted with other materials it makes an excellent fertilizer. The frothy top portion at times forms a surface layer two feet thick. Generally it is mixed with dead rats, dead dogs, dead cats, pieces of flesh, blood and hair. During certain portions of the year this scum is utilized to furnish fat for making soap. When

the weather is too hot for this, some of it is transformed into fertilizers.

At no season of the year is this character of the stream radically changed. The stench from it varies with the wind. Such is the origin of the bad air and some of the bad water which is constantly dished up to the people of Chicago. Undoubted evidence is presented that this material, and that from the other sewers of Chicago does, at not distant intervals, enter the pumping works and return to the bodies whence it came. On a large scale it illustrates the stories told by arctic explorers respecting the drinking habits of certain tribes. The narcotic fungus being scarce, one person takes the pure drug, the next drinks his urine, and so on till the entire party has had a drink. Infinitely filthy and disgusting it repels even the sluggish mind and turns the stoutest stomach, until it gets used to it as Chicago people are said to do.

If filth would produce disease certainly Chicago should be destroyed thereby.

The Influence of Race in the Production of Trachoma.

Trachoma, or granular inflammation of the conjunctiva, as it is popularly termed, is one of the most perplexing of eye diseases. No one has devised a local treatment which has afforded universal satisfaction. Just now jequirity is having a run. That it is capable of accomplishing results unattainable under former methods of treatment is certain. But that it is the remedy for trachoma does not appear evident. All observers agree that it is improper to use it while there is a morbid secretion from the eye. In short it can be used only after the trachoma is practically cured, or the inflammation attending it is in abeyance. It deals very satisfactorily with the results of trachoma. But we are still left to other measures in treating the early stages of the affection. This being true, it is worth while to recur to first principles, for a new study of trachoma. Bearing upon this is a very suggestive paper by Dr. Swan M. Burnett (*Archiv. Oph.*, July, 1884). At Washington for several years he has noted in his practice all cases of eye diseases in both colored and white persons. In the paper before us he has classified these cases. The part of the paper that concerns us now is that relating to trachoma. Here we find that no colored person had this disease. Of all the patients having conjunctival diseases, there were about half as many white

as black. Among the white there were forty-four cases of trachoma. Taking the same number of cases among the white as the black, and there would have been eighty-eight cases among the white and none among the black. Dr. Burnett says that in eastern Tennessee there was during his early life there the same absence of this disease among the colored residents.

Putting together all the facts at his disposal, he has for several years been disposed to regard the trachoma granule as a deposit of a material analogous in character to tubercle. Thus each of them destroys the tissue in which they are imbedded, leaving a cicatrix. In both affections there may be successive crops. Hence, with successive crops, and their resultant cicatrices, we have a total destruction of the mucous membrane as is seen in old cases. If Burnett's views are to be received, then the treatment of trachoma must be constitutional—provide such agencies as will prevent the formation of the deposit. Of course there need be no neglect of any useful local treatment.

From our own clinical experience we have long since learned to place more reliance upon constitutional than upon the mere local treatment. All the agencies by which a perfect general and local nutrition could be induced, have been habitually employed, with the result of materially hastening the cure of trachomatous cases.

The number of negroes in Detroit is not large, but among them it has not fallen to our lot to observe a case of trachoma. Farther, we have the same report from large numbers of ophthalmic surgeons. Be the explanation what it may in the light of farther study, it is clear that constitutional conditions do have a notable influence upon the origin and best treatment of cases of trachoma.

Midwifery Practice in Buffalo, N. Y.

At a late meeting of the Buffalo Medical Society (*New York Medical Journal*) Dr. Pryor read a paper on "The Status of the Midwife in Buffalo." His researches showed that about two-thirds of the cases of child-births of that city were reported to the city hall by midwives. He found that the persons thus attended were among the most ignorant classes, including most of the foreign born. The causes for this state of things are manifold. In foreign countries physicians are relatively few and so the midwife was a necessity, but in this country physicians are suffi-

cient for all the needs of midwifery practice. Then the midwives worked cheap as compared with physicians, charging from three to five dollars per case. Farther, the people believed that the midwife was safe, as in cases of difficulty she could call for the aid of physicians. He showed that the ignorance of the average midwife was appalling, and that her mental caliber and education and aims all precluded the idea of her making any great advancement. All that she learned was from experience, generally she surpassed Herod in her slaughter of the innocent, not infrequently carrying with the child the mother also. He claimed that if the matter was exhibited in its true light, the midwife would make as good an oculist as midwife. But in this or any other specialty except midwifery she would at once be met with such a storm of indignation as to drive her from the land.

In the discussion upon this paper Dr. Hartwig said that he knew a midwife of Buffalo who said she had attended one thousand successive successful cases, among which she had turned fifty times in cross presentations, had had fifty footling cases, and one of placenta previa, had three times called a doctor to apply the forceps, and had removed the placenta with her hand fifty times. Some of the speakers did not credit this story, and thought that plenty of physicians charged sufficiently low fees for the means of the poorest patient. All agreed that it was needful for the physicians to procure the education of midwives.

Since the training school for nurses has opened with a liberal endowment, at Harper Hospital, in Detroit, the nurses including some of the best of the midwives have organized themselves into a society, by which they propose to emulate the attainments of the graduates of the nursing school. They have procured regular instruction from members of the medical profession proficient in the art and science of midwifery. They are said to be quite particular as to those whom they admit to membership. This move being entirely spontaneous on the part of the nurses in Detroit is very hopeful for the progress of this branch here. What has happened here will happen elsewhere, especially in such cities as possess well-endowed and well-conducted training schools for nurses. Were it possible to so educate the masses as that they might appreciate the needs for education on the part of those who attend midwifery cases, the reform so desirable and desired would be accomplished.

Mooren on Glaucoma.

A review of Mooren's late work, in the *Glasgow Med. Jour.*, condenses in an admirable manner our present knowledge of this interesting disease. The increase of tension as a consequence of disturbance of the balance of secretion and excretion of the humors of the eye is now the only reliable symptom of glaucoma. Formerly this increased tension was referred to a pathological increase of secretion, either by inflammatory process, or secretion neurosis. The discovery of the excretory channels in the ciliary region, and their more or less complete obstruction in glaucoma, with the consequent retention of the secretions, gave to this symptom a purely mechanical character, and at the same time afforded an explanation of the therapeutic action of iridectomy and sclerotomy, which by the partial opening up of the passage restored the equilibrium of the fluids. After referring to the pathological observations of Knies, who found in fifteen cases a circular adhesion of the periphery to Descemet's membrane, obliteration of the canal of Fontana and a cellular infiltration of the neighborhood; to the experiments of Weber, who, by injecting oil into the anterior chamber, artificially closed Fontana's space and increased the tension of the eye-ball; and to those of Scholler, in which a glaucoma was developed in the rabbit by cauterizing the sclero-corneal region, Mooren affirms that pathological anatomy, experiment, and clinical observation, all combine to put the fact beyond a doubt that a more or less complete impermeability of the filtration channels of the sclero-corneal region can generate a glaucoma. But while this is an important fact, it is not the only and essential condition in glaucoma. Indeed, Pagenstecher showed from pathological specimens that sometimes Fontana's space was obstructed in glaucoma, and sometimes it was not. Hence, while admitting that the occlusion of these spaces may influence the height of the glaucomatous process, he does not think it is necessarily the cause. This brings him to the old theory of a secretion neurosis, which is supported by the recent investigations of Hippel and Grunhagen. By this view every irritation of the trigeminus is followed by increase of tension through increased secretion at the posterior pole of the eye, which, by pressing forward the lens and the iris, may partially obstruct the filtration channels and interfere with the circulation of this region. The experimenters also noticed that

the sympathetic regulated the strong and rapid changes of blood pressure. It seems that all things point to glaucoma as essentially a secretion neurosis. If this be kept in mind, the accompanying symptoms of an inflammatory nature, whether primary or secondary in character, must in the main be regarded as a manifestation of a neurosis and dependent upon a special condition of the nervous system. Mooren regards iridectomy as equivalent to a restriction of the nerves, and sclerotomy to a neurotomy.

Pathology of Sympathetic Ophthalmia.

Dr. S. Theobald (*Archiv. Oph.*, vol. xiii, page 64, et. seq.) very thoroughly discusses the subject of the so-called sympathetic ophthalmia. He thinks his facts and reasonings warrant the following conclusions:

1. The doctrine that sympathetic ophthalmia is the result of progressive optic neuritis, which spreads from the primarily to the secondarily affected eye, is supported by no facts worthy of serious consideration, but is the outcome of grossly mis-interpreted clinical and pathologico-anatomical observations.
2. There is an overwhelming preponderance of testimony, both clinical and pathologico-anatomical, in favor of the at one time universally accepted doctrine that sympathetic ophthalmitis, like sympathetic irritation, is a reflex neurosis, dependent upon irritation of the ciliary nerves of the exciting eye. This testimony goes to show that inflammatory changes of texture as well as abnormalities of sensation, may be produced by reflex nerve influence.
3. The history of the last quarter of a century plainly shows that all are liable to err, hence clinicians must not cast aside their own observations at every claim of the experimental pathologist.

In answer to these views, Dr. H. P. H. Mules, of England, has a paper in the following number of the same *Archives*. In this paper Dr. Mules claims that it is improper to use the term sympathetic ophthalmia, but the proper term is septic ophthalmitis. He then quotes observers who have demonstrated the existence of lymph spaces about the optic nerves, and who have traced septic germs down the lymph spaces of one eye and up those of the other, proving to his mind that in this manner an inflammation of one eye is transmitted to the other. That aside from this element there exist sympathetic irritation he admits, but he also claims that is a totally

different affair. If the septic matter be transmitted from one eye to another, the removal of the offending eye will not check the inflammation but only the irritation.

He thus divides the ordinary sympathetic ophthalmia into two distinct affections, septic ophthalmitis and sympathetic irritation. Each case must be studied and treated by itself. If these views be accepted the perplexities and gravity of the prognosis will be increased. At present all cases are treated as of the utmost gravity. Beyond a doubt large numbers of eyes are removed without adequate reason, but this is, perhaps, better than that even a few eyes should be lost by an error upon the opposite side. The question is still an open one in very many of its phases.

When Shall Patients be Dismissed from Medical Attendance.

THE dismissal of patients from treatment is usually determined with ease by the medical attendant. Occasional cases occasion great perplexity to the physician. The border line between health and disease is so illy defined that oftentimes, instead of being a distinct mark, it is a broad belt without any definite limitation on either side. Hence it is that, with the purest motives, some physicians discharge patients before they are cured, and others continue to treat them long after they are well. It is a matter of knowledge and nice judgment to avoid either extreme. Among the wealthy physicians are often compelled to continue attendance after their patients are well, and know they are well, simply because they enjoy the doctor's visits and are willing to pay for his frequent attendance. When this is understood there can be no objection to the arrangement. But if it can be avoided, it is unwise to drop attendance upon a patient while he still needs medical attendance, as well as to continue it after there is no longer need of medical service. As the patient is within the doctor's power, he should exercise the greatest care for the patient's real good.

But a more difficult question is presented by the query, when shall patients be dismissed from insane asylums? Dr. Ralph Parsons, in the *Journal of Nervous Diseases*, discusses this question at considerable length. His final conclusions are these:

1. Inasmuch as many recoveries take place in asylums for the insane, it is to be expected that some convalescent patients may be found at any time in the wards.

2. While possibly, now and then a convalescent patient may be detained on probation an unnecessary period of time, such cases are not of frequent occurrence, nor important in their consequences when they happen. When they do occur, the detention is very rarely through criminal intent.

3. Many harmless incurables are unnecessarily detained in asylums for the insane. These incurables would be happier in the enjoyment of ordinary family life and associations. Systematic efforts should be made to secure their enlargement and their establishment under family care.

4. Under certain circumstances curable patients should be removed from asylum restraints and associations, yet uncured.

An Oyster Mistaken for a Malignant Growth.

Dr. Theobald, *Archiv. Oph.*, relates the following incident at one of the Baltimore medical societies. A patient having suffered from some obscure symptoms, sought medical advice for the relief of her sufferings. A suspicious looking mass was discovered blocking up the posterior nares. This was removed without difficulty, having apparently sloughed off from its former attachments. The supposed neoplasm being regarded as probably of a malignant character, it was deemed of the first importance that its histological structure should be made out. A portion of the tissue was teased out and submitted to a microscopical examination. This completed, the growth was exhibited to the society in question, its histological characteristics were duly set forth, and the clinical facts of the case related. An animated discussion followed, and more than one hypothesis was advanced to account for the unusual features which the case presented. While this was in progress, an inquisitive individual, with microscopical proclivities, inspected the tumor with more care than had previously been thought requisite. The debate was suddenly cut short by the announcement that the suspicious neoplasm was after all, but a half digested oyster, a harmless specimen of our should be familiar bi-valve, which probably, during a previous spell of vomiting, had become lodged at the point where it was discovered.

This is a capital illustration of a very common mistake. Discussions long, labored, loud, are held over facts which never existed, or at least never existed as the disputants claimed. All of us too often forget "to be

sure we are right before we go ahead." In this age of material facts, the temptation constantly presents itself to claim the existence of facts on slight and insufficient testimony. These claims give temporary notoriety, but they at last return upon their authors, and render their utterances unworthy of credence.

Squibb on Extract of Tea and Coffee as Substitutes for Coca and Guarana.

Dr. Squibb, in his July *Ephemeris* gives in detail the reasons why he has sought to bring to the notice of the profession the extracts of tea and coffee as substitutes for the extracts of coca and guarana. Briefly, he found by observation and experiment that there was but little of good coca and guarana to be found in the market. The price asked for the poor article was very large. As a result the profession has been asking the people to buy poor inefficient drugs at a high price. The results have been very unsatisfactory both to scientific physicians and to patients. To obtain a real substitute for these drugs Dr. Squibb has taken the trouble to make careful physiological tests. All of these drugs contain caffeine or an alkaloid having an analogous action. Apparently most of their virtues depend upon this alkaloid. Hence he took as a standard a dose of caffeine which would always under definite conditions produce a given effect. Then he took such doses of each drug as were needed to produce the same effect as the standard doses of caffeine.

In this manner he has ascertained that three grains of caffeine are equivalent to one hundred and eighty grains of coca, to seventy grains of tea, to sixty grains of guarana, to one hundred and fifty grains of coffee.

The details given as to the process by which the extracts of tea and coffee are made is such as to gain the confidence of all who investigate it.

The difference between the effects of caffeine and the extracts of green coffee, tea, coca, or guarana are difficult to describe. In general terms it may be said that each of these is caffeine and something more. The effect seemed broader, more comprehensive, more agreeable, giving a better sense of rest and well-being. We shall await with interest the result of a wider clinical experience in the use of these agents.

Ely "On a Winter in Colorado."

The statements made by physicians and others respecting any special climate are quite apt to represent a very incorrect notion of the real facts. The whole truth has not been told. Perhaps to no climate is this more applicable than to that of Colorado. Dr. Ely has collected some personal observations, and published the same in the *N. Y. Med. Jour.*, from which we desire to quote, as they seem to bear the impress of a mind that could see, and would tell the whole truth. As illustrating the value of all testimony which is not written, he tells the following: He asked a lady at the hotel how many days she had been shut up by bad weather during the past winter. Not more than six, she replied. And yet eighty would have been nearer the truth, as she admitted when the Dr. showed her his written memoranda. Much of the testimony about the climate from invalids is about as trustworthy as this. The doctor gives his experience thus: He was too feeble for horseback riding, walking, or climbing; hence he was forced to either sit on the piazza or ride. He is less sensitive to cold than the average. During the winter he did not remain indoors when it was possible for him to be out. He sat out doors when all others, even well persons, were in-doors. He was able to drive during storms and very cold winds without apparent harm. But even with all his energy and determination to be out he was consigned to the house by bad weather from Sept. 1st to May 1st, forty-two days. Of the remaining days there were many when to be out at all was a burden to the flesh, and even thus it was possible to be out but from two to fours. The weather was variable after the early portion of the season. At one time the thermometer sank to twenty-two degrees below zero, but there was no long continued intense cold. But the climate is the very best of its kind, and destined to grow in popularity, as its merits and demerits become popularly known.

Memoranda.

Vienna has an average of sixty persons living in each house.

The next meeting of the International Congress will be held in Washington, 1887.

Since 1828 cholera has attacked four millions of Russians, and killed one million, six hundred thousand.

Dr. W. J. Kendrick died at his home in Plymouth, Mich., Aug. 29. He was a graduate of Detroit Medical College.

Dr. Waugh (*Med. and Surg. Reporter*), reports the case of a woman who bore seven living children within thirty-two months.

The French government has given the order of the Legion of Honor to Koch for his services in the cholera district of France.

Sixty-three thousand dollars have been fraudulently extracted from the Medical Bureau of the Navy Department, at Washington.

The English government has appointed a commission to go to India and study cholera. Dr. Klein and Dr. H. Gibbes are its members.

The prevalence of cholera has diminished at Marseilles and Toulon, but it has spread to forty places in France and a large number in Italy.

Dr. W. A. Hammond says he has four novels written, and will hereafter publish two a year. He says he would rather be a novelist than a doctor.

A Philadelphia doctor has been arrested for grave robbery at Norristown. Perhaps cremation in that city is popular on account of the frequency of this crime.

At present date three thousand, nine hundred and fifty-two deaths have been reported in France from cholera. They occurred in one hundred and thirty-one cities and villages.

The Minnesota State Medical Society at its last meeting appointed a committee to devise measures for better working methods in the Society. It is dissatisfied with its present modes of work.

St. Mary's Hospital in Brooklyn has eleven different departments or specialties; Roosevelt Hospital, of New York, has but a single surgeon for the entire surgical work. Which plan is the best? Both claim complete success.

Fools are dying: such was our thought on reading (*Med. Surg. Jour.*), that some persons, in banter, took a lot of pills regularly prescribed for a sick person. One person died soon, and four others were saved with difficulty.

It is announced that the *Pacific Medical*

and *Surgical Journal* has absorbed the *Western Lancet*. The senior editor of the old journal will still continue his position. It is said that the *Journal* will be improved in all respects.

St. Petersburg, with a population of a million, has a death rate of thirty-five per thousand. The city has no sewers. Its water supply is taken from the river Neva, and is more or less contaminated by percolation from the subsoil.

Prof. E. Jæger, the oculist, died at the age of sixty-six years. Since 1857 he has been ophthalmologist to the great Vienna Hospital. His writings on diseases of the eye and his test types are universally known by all interested in the study of the eye.

Dr. Patterson (*Glasgow Med. Jour.*), reports the removal from the bladder of a man, of a stone of enormous size. The weight of the stone was fifteen ounces, its long circumference ten and five-eighth inches, and its short diameter eight and one-eighth inches.

Dr. Julius Wise has resigned the editorship of the *Weekly Medical Review*, and Dr. Robert Luedeking succeeds him. Dr. Wise enters a medical school as teacher, and upon the preparation of a literary work, entitled, "Wit and Wisdom in the Medical Profession."

A Dr. Patton, in the *Southern Clinic*, defines homœopathy thus: "Similia similibus curantur; the minimum dose; the single remedy; proving the action of drugs upon the healthy subject." As he says his definition is made for Dr. Palmer's benefit, we trust that he may be understood.

The cities of Italy are of a notoriously defective hygienic condition. An American who ventured to suggest to an official of high rank in Florence the importance of a good system of drainage, was told that the civilization of Italy was older than his own, and needed none of his suggestions.

Dr. Jas. G. Kiernan has been elected Medical Superintendent of the Cook County Hospital for the Insane, at Chicago. No doubt we shall hear of his scientific work therein. It is to be hoped that the conditions under which he will labor may be such as to admit of his doing such work as he desires.

The revenue of the *British Medical Journal* for last year was over one hundred thousand dollars. Half of this comes from sub-

scriptions and annual dues of members of the Association, and the rest from advertisements, sales, and interest upon investments. Over one thousand members were added to the Association last year.

The widow of the great physiologist, M. Claude Bernard, has recently been mulcted of five francs for keeping a nuisance in the shape of cats and dogs. These she gathered in large numbers and looked after them in her own yard, as part atonement for the misery inflicted upon the race of cats and dogs by her distinguished husband.

Dr. Scott (*St. Louis Courier of Medicine*) relates the case of a native of Missouri who had not been wet all over since 1863. The doctor being astonished at this fact made inquiries respecting other residents of the same state. He found that not a third of the people in Missouri bathed once a month, and fifty per cent. do not take a full bath from October to May.

The *American Meteorological Journal* is the title of a journal published by W. H. Burr & Co., of Detroit, at \$3. per year. It is edited by Dr. Mark Harrington, of Ann Arbor. It is intended to make this the exponent of the latest researches in this subject. As it is the only journal in the United States exclusively devoted to this subject, it will be eagerly sought after by the students of this branch.

During 1882 the average amount of beer consumed in the different districts of Germany, ranged from eighty-four to one hundred and eighty-six litres, in Bavaria it reached two hundred and thirty-three litres, and in Munich four hundred and thirty-two litres. It is said that the average heart is larger in Munich than elsewhere. It is believed by many that this is due to the enormous consumption of beer.

The *Cincinnati Lancet* gives the record of the new member of the Board of Health of Cincinnati. It quotes verbatim from the police court docket. Since 1878 he has been before the court six times, three times for assault and battery, and three times for disorderly conduct. Twice he was convicted and four times discharged. Is such the training required for a reputable efficient member of Cincinnati's health board?

Dr. Chas. Rynd, of Adrian, Mich., died suddenly at his home, Aug. 20th. It is said that the cause of his death was rheumatism

of the heart. He was forty-nine years old, graduated from the Medical Department of Michigan University in '59, was elected regent of the University in '71. He had much to do with shaping the policy of the medical department during his regency. He has always been an able speaker and politician.

The health commissioner of Chicago (*Medical News*, August 2,) says: "In the thirteenth ward thirty thousand people live on unsewered land, from three to five feet below the level of the street. The privy vaults and house sites are saturated with water eight months of the year, the ground receiving the sewerage from the dwellings and the seepage from the vaults. Cottages of four rooms have a family in each room with many children in each family."

The capital of Michigan is to have a medical journal, beginning with September. Its name will be *Michigan Medical Monthly*, and its editor Dr. Geo. F. Ranney, assisted by Dr. Geo. H. Cleveland. We have not been informed as to its size and price and general make-up, but we doubt not that in all these and in all other respects it will be started and maintained in the best manner. We cordially welcome it and its distinguished head to a labor of love for the benefit of the medical profession.

Dr. Erasmus Wilson died August 8th, aged seventy-five. His early career was made famous by his work upon anatomy, and his later by his labors in dermatology. He did much for medical education with his wealth. He founded a chair of dermatology and a museum of dermatology in the College of Surgeons. He founded a chair of pathology in the University of Aberdeen. He made large gifts to hospitals. Through his energy and gifts Cleopatra's needle was brought from the Nile to the Thames.

Dr. Long (*Journal American Medical Association*) says that during the first week in August, in water obtained at the Chicago Medical College, he found free ammonia from two to eight parts per hundred million, and albuminoid between ten and sixteen parts per hundred million. This is far beyond the safe limits of these substances in drinking water. By the microscope he found bacteria. At other times he has observed the same pollution of water for periods of a month. His observations always found them.

A correspondent of the *Northwestern Lancet* is annoyed during his travels through the clinics of Europe, to see the dense ignorance of the American graduate. He thinks the worst go to Europe. In short, he is ashamed of his countrymen. If he gives facts, he has good reason to be ashamed. The average American graduate, at the present time, does not awaken the highest admiration among really educated men, here or elsewhere. Worst of all, he has no idea but that he has the best of educations, medical or otherwise.

Dr. J. J. Woodward, U. S. A., died August 19th, aged fifty-two. He wrote many papers on many subjects, but he will doubtless be best remembered for his labors in editing the *Medical and Surgical History of the War of the Rebellion*. He was a most enthusiastic worker in the application of the microscope and photography to the study of medical problems. At the last meeting of the American Medical Association at Richmond, he was elected president, but owing to his failing health he was unable to preside at the St. Paul meeting.

Antipyrin is the name of a new substitute for quinine. It is attained by the action of acetic ether on aniline or by the oxidation of quinoline or chinoline. It is a white crystalline powder, having a slight aromatic odor, a somewhat bitter taste, soluble in water in proportion of one to three. The dose as an antipyretic is, for adults fifteen to thirty grains per hour till eighty or ninety grains are taken.

It is patented by Dr. L. Knorr, of Erlangen. From present observations it is not likely to drive quinine out of the market.

The *New York Medical Journal* thinks that the special societies are not wise in holding their meetings far from all the profession as to both time and place, as for instance the ophthalmological and otological societies, in the Catskill mountains, the latter part of July. It thinks that this isolation still farther separates the workers in these and other special fields from the mass of the profession, and that this isolation seems to be desired by the specialists. We presume that the secret of the whole matter is that such times and places best suit the pleasure and interest of those gathered at these meetings.

Spitzka says (*Amer. Jour. Neu. Psy.*) that half the medical testimony given in will cases is rotten—and that this testimony suits the lawyers and seems to influence juries quite as

well as sound testimony. He says that too many doctors are anxious to be called as witnesses. He tells of one medical man who went to the court clerks asking them to recommend him to disputing parties. He thinks that the greatest good to be obtained from an expert is not so much his statements upon the witness stand as his scientific arrangement of related facts, the sifting out of unscientific inconsistencies, in short, the logical and historical association of testimony into a scientific and harmonious whole.

Kiernan (*Chicago Med. Jour.*), says that Spitzka's work on brain disease requires brain work in its perusal, but its general principles grasped, it proves of great value. Hammond's work is easily perused, readily assimilated, but is not a safe guide in practice, because of the exceptional views of its author. Mann's book from its lack of system and prolixity, requires equal labor in its perusal with that of Dr. Spitzka, and this labor is not well rewarded. Worcester's book is valueless because of its dishonest therapeutic views, while Hamilton's book has all the vices of the works of Hammond and Mann in a greater degree than either, and none of their virtues, and displays the erratic views of its author.

Dr. C. T. Southworth, of Monroe, Mich., died, aged fifty-seven years. He received a full classical education, and attended medical lectures at the College of Physicians and Surgeons, of N. Y., and at the University of Madrid, Spain, where he graduated. He also studied in Paris. He practiced for two years at Havana, Cuba, and for some time at Vera Cruz was an army surgeon under Santa Anna. In 1859 he settled in Monroe, Mich., where he remained till his death. His health had been vigorous till some six weeks prior to his death, when he was injured by being thrown from his carriage. These injuries were followed by a pneumonia, under which he sank and died. He was intense in both his likes and dislikes. The readers of the *DETROIT LANCET* and its predecessors will recall many excellent contributions from his scholarly pen. He was recognized among his medical friends through the State as a man of power.

Dr. J. F. Jenkins writes the *Journal of the American Medical Association* that he has in his possession facts from the highest authority, affirming that the guests at Mrs. Leiter's reception of the American Medical Association, at its late meeting, in Washington, were

most courteous and civil. This is important, as a correspondent of the *N. Y. Med. Jour.* stated that "men stalked in her house, hats on their heads, from front room to dining room, where they fought like wolves for places at the tables, overturning piles of plates, breaking expensive ornaments, and soiling the rugs with pools of tobacco-juice." This stuff has been copied into foreign journals as a sample of the manners of the American medical profession. The writer of this note was present a short time at this reception, and during this interval all behaved in all respects as gentlemen. The facts presented by Dr. Jenkins seem to cover all the period of the reception. We trust that those journals which have been at such pains to scatter this bit of gossip will have the justice to apply the remedy, if remedy there be.

Editor's Book Table.

Annual Report of the Board of Health of Illinois for 1882.*

From time to time we have called attention to several portions of this report, as from time to time they were issued to the public. To these it is needless to call farther attention. Still, the amount of information respecting the medical colleges of the United States is so great and so useful to all medical men, that we venture to say that in two hundred pages of this report we have an amount of this sort of knowledge not otherwise attainable without great difficulty and expense. An account of every medical college, past or present is given, the number of inhabitants of each state, and of each city, containing a medical college, and the proportion of graduates to the entire population. The laws, also, if there be any, regulating the practice of medicine are added. Of course the standard required by the Illinois Board of the medical schools they recognize, is also stated.

The remaining four hundred pages are devoted to a presentation of the small-pox epidemic in Illinois, from Jan. 1st, 1881, to Dec. 31st, 1883. The money expense of this epidemic is given at four million four hundred and three thousand nine hundred and sixty-eight dollars. It is interesting to note that of

*FIFTH ANNUAL REPORT OF THE ILLINOIS STATE Board of Health. Springfield, Illinois. Paper: pp. 633.

the vaccinated but six per cent. died, while of the unvaccinated forty-nine per cent. died. Of those vaccinated, both before and after being attacked with the disease none died, while about six per cent. of those vaccinated before taking the disease, and the same of those vaccinated only after taking the disease. It is not surprising if from these data the board insists on the regular vaccination of all persons, if necessary, at the public expense, and by compulsion, if persuasion will not answer.

The volume represents a vast amount of work, quite different from that performed by other state boards of health.

Hooper's Physician's Vade Mecum.*

In a late issue of the *DETROIT LANCET* attention was directed to the general character of this work and the contents of the first volume. The second volume now lies before us. It discusses with more or less fulness and accuracy the following subjects: Diseases of the nervous system; of the organs of circulation, of respiration of digestion, of abdominal viscera, of the urinary organs, of organs of generation, of organs of sense, of the skin and its appendages, of parasitic animals, of poisons and their antidotes. The work closes with the classification of remedies and a list of formulæ.

The general treatment of these several subjects is identical with that manifested in volume one. The notes respecting diseases of the eye and ear are very defective. This perhaps matters little, as those who desire information respecting the nature and treatment of these diseases will be sure to seek larger works and more recent ones.

The Fifth American Edition of Roberts' Practice of Medicine.†

When the first edition of this work appeared we wrote, "To the student it will be a gift of priceless value." Years have passed since, but the statement still remains as true

*HOOPER'S PHYSICIAN'S VADE MECUM, TENTH edition; revised by Dr. W. A. Gyu and Dr. John Harley. Vol. II. New York: William Wood & Co. 1884. Pp 358. The June issue of Wood's Medical Library, sold only by subscription, twelve volumes for \$15.

†THE THEORY AND PRACTICE OF MEDICINE. By Frederick T. Roberts, M. D. With illustrations. Fifth American edition. Philadelphia: P. Blakiston, Son & Co. 1884. Cloth; pp. 1008. For sale by John MacFarlane, Detroit.

as on the day in which it was written. In fact it is given to few men to condense the whole of the practice of medicine into one volume of moderate compass, and still retain a readable and attractive diction. This the author has done with exceptional skill and ability. Of course the present work differs greatly from the first. Changes have taken place in our knowledge of many portions of the science and practice of medicine. These the author has incorporated in his book. Especially have the portions devoted to the nervous system required such thorough revision.

The publishers have issued it in their best style.

Tennessee State Medical Society Transactions for 1884.*

Besides the minutes of the meeting and the president's address, this volume contains a paper upon "Eczema," by R. F. Evans; a report upon "Therapeutics," by Dr. H. Berlin; a paper upon "Puerperal Fever," by A. J. Swaney; a study of the vital statistics of small-pox in Chattanooga, during 1882-83; a paper upon "Hospital gangrene," by J. R. Rathmell; a paper on "Hot Water Therapeutics," by Mary T. Davis; a paper on "Scrofula," by Dr. John Blankenship; a paper on "Senile Prostatic Disease," by S. T. Harrison; a paper on "Hygiene of the Eye," by J. M. Masters; "Melanotic Sarcoma," by Dr. J. G. Sinclair; "Excitation of the Clitoris," by Dr. Chas. F. Ristine; "Diphtheritic Sequelæ," by W. M. Vertrees.

All of these are well prepared papers, and as a whole, do credit to Tennessee. Still, that state could do far better if its best men would bend their energies to this end.

Amidon's Student's Manual of Electro-Therapeutics.†

This little work contains the meat of the author's lectures at the New York Woman's Medical College. In it he records his protest against the humbug that has ever surrounded the use of this agent by many persons in and out of the profession. He tells

the reader so much of electro-physics as is needful to properly understand the construction and use of medical batteries. He points out the more common and gross physiological effects of electricity. He outlines the methods of electro-diagnosis, and he determines the kind of electricity and the manner of its application, indicated by different diseased conditions.

The style is such as the reader is able to follow with ease, and grasp the author's meaning.

MORTON ON "NEUROLOGICAL SPECIALISM." A twelve paged reprint from the *Journal of Nervous and Mental Diseases*.

The author has no sympathy with the immature jump from the medical school into a specialty. An extensive training in general practice he regards as essential to the proper education of every specialist. Nor can this ever be forgotten by the conscientious specialist. With this limitation he shows the reasons why he thinks that neurology should constitute a specialty.

REPORT FOR 1883 OF THE PRESBYTERIAN EYE, EAR AND THROAT HOSPITAL OF BALTIMORE.

This report shows a vast amount of charity work performed in this department in Baltimore. If to the operations of this charity we add the free work done at the other eye and ear infirmaries and free clinics in the same city we have a sum total that is appalling. The thoughtful mind inquires what cases are left for which pay is received?

WOOD'S ANSWER TO THE QUERY, WHAT CASES SHALL Be Sent to Colorado? A nineteen paged reprint from the *Denver Medical Times*.

He says that no patient should be sent there after a considerable deposit of tubercle has taken place except for the summer. The thin blooded may be sent to Colorado, but not the full blooded. Those on the up grade of life may be sent there, but not those on the down grade.

CROTHERS ON "THE DISEASE OF INEBRIETY." A fourteen paged reprint from the *Journal of Social Science*.

In this the author maintains with his well-known ability the fact that inebriety is a disease; that we do not as yet understand all the scope of the laws under which it is developed. But it can be best treated on physical principles much as is insanity under management separate from the insane.

*MEDICAL SOCIETY OF THE STATE OF TENNESSEE. Transactions for 1884. Nashville, Tennessee. Paper, pp. 130.

†STUDENT'S MANUAL OF ELECTRO-THERAPEUTICS. By R. W. Amidon, A. M., M. D. G. P. Putnam's Sons & Co., 1884. Cloth, pp. 94. For sale by John MacFarlane, Detroit. Price \$1.00.

PRINCE ON "THE PEROXIDE OF HYDROGEN." A seven paged reprint from the *St. Louis Medical Journal*.

The author sets forth the facility with which this remedy in the presence of pus sets free oxygen in a nascent condition and so effectually disinfects a suppurating cavity. He details a very satisfactory use of it in a case of gonorrhoeal ophthalmia and one of mastoid abscess.

HUGHES ON "THE CURABILITY OF LOCOMOTOR ATAXIA and the Simulations of Posterior Spinal Sclerosis."

The author shows that either locomotor ataxia is curable or it is simulated by another disease of the spinal cord which is curable or cannot be diagnosticated from it. Hence it would appear wise for diagnosticians to withhold the fatal diagnosis till the progress of the case should confirm the diagnosis.

ROBERTS ON "ANEURISM OF THE FEMORAL ARTERY and Knife Wound of the Intestines." An eleven paged reprint from the *American Practitioner*.

In each instance a successful case is reported. In the first the internal iliac artery was tied, and in the second the abdomen was opened, the bleeding vessels ligatured and the wounds closed. All ended satisfactorily to patients and doctor.

GRIFFITHS ON "THE UNITY OF THE POISONS FROM scarlet fever, typhoid, and puerperal fevers; erysipelas, diphtheria, sore throats, certain forms of diarrhoea and allied affections, pleurisy, pneumonia pleuro-pneumonia and many other ailments usually regarded as distinct affections." An eight paged reprint from the *Glasgow Medical Journal*.

The proof of the proposition is not evident to us.

JACOBI ON "CONGENITAL LIPOMA." A twenty-one paged reprint from the *Archives of Pediatrics*.

The author details his own cases and all he could find in the literature of the past fifty years. The affection is a rare one as but few cases can be found on record.

KINNE ON "THE SUBCUTANEOUS INJECTION OF QUININE." A four-paged reprint from the *Obstetric Gazette*.

The writer's experience continues to warrant him in commending this mode of administering quinine to the attention of the profession.

BODECKER ON "IODOFORM IN DENTAL SURGERY." A twelve paged reprint from the *Independent Practitioner*.

WRIGHTMAN ON "ELECTROTHERAPY." A twenty four paged thesis of the author's observations on this subject.

CARSTENS ON A "NEW METHOD OF TREATING RUPTURED PERINEUM." A seven paged reprint from the *Amer. Jour. Obstetrics*.

SEVENTEENTH ANNUAL REPORT of the Trustees of the Massachusetts General Hospital. 1884.

HUGHES ON "MORAL INSANITY." An eighteen paged reprint from the *Alienist and Neurologist*.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Physiology.

THEORIES OF COLOR PERCEPTION.—Dr. Swan M. Burnett, of Washington, D. C., elaborately discusses in the July number of the *American Journal of the Medical Sciences*, the various theories of color-perception, and points out that none of them accounts in a consistent manner for all the phenomena of normal and abnormal colored-vision, and that, moreover, there are certain objections on physical grounds which, with our present knowledge of the laws of molecular and wave-motion, are insurmountable. He advances a theory which he thinks meets the requirements of the case in the light of recently acquired knowledge. He holds that it is essential to do away with the idea of the retina as a differentiating organ, and that it should be looked upon simply as a receiving and transmitting structure which shall give up faithfully to the optic nerve the impressions made upon it by the waves of the luminiferous ether. These impressions are carried by the nerve to the brain and are there properly differentiated and converted into sensations. He believes that by this means all the phenomena of color-perception and color-blindness can be explained in a natural and consistent manner without the necessity of imagining new tissues, or novel or unusual reactions of these tissues to light. Dr. Burnett considers the retina to be a substance whose ultimate structure is such as to allow it to respond at one and the same time to a large number of ethereal vibrations; at least such a number as shall be represented by the clearly distinguishable colors of the spectrum.

His theory, Dr. Burnett holds, explains the phenomena of defects in color-perception and receives support from biology and embryology.

THE NUTRITIVE VALUE OF BRANNY FOODS.
—Dr. N. D. Randolph (*New York Medical Journal*, July 27, 1884.) in connection with others has made an extensive study of this subject, from which he reaches the following:

1. The carbohydrates of bran are digested by man to but a slight degree.

2. The nutritive salts of the wheat grain are contained chiefly in the bran, and therefore, when bread is eaten to the exclusion of other foods, the kinds of bread which contain these elements are the more valuable. When, however, as is usually the case, bread is used as an adjunct to other foods which contain the inorganic nutritive elements, a white bread offers, weight for weight, more available food than does one containing bran.

3. By far the major portion of the gluten of wheat exists in the central four fifths of the grain, entirely independent of the cells of the fourth bran layer. Farther, the cells of gluten, even when thoroughly cooked, are little, if at all, affected by passage through the digestive tract of the healthy adult.

4. In an ordinary mixed diet the retention of bran in flour is a false economy as its presence so quickens peristaltic action as to prevent the complete digestion and absorption, not only of the proteids present in the branny food, but also of other food stuffs ingested at the same time.

5. Inasmuch as in the bran of wheat as ordinarily removed, there is adherent a noteworthy amount of the true gluten of the endosperm, any process which in the production of wheaten flour should remove simply the three cortical protective layers of the grain would yield a flour at once cheaper and more nutritious than that ordinarily used.

SOME PECULIARITIES CONNECTED WITH RETINAL IMAGES.—Dr. Sidney Hodges (*The Brain*) gives the result of numerous studies of retinal images. He concludes:

1. That the bright color of an after-image produced by gazing steadily at a bright light, or a strongly illuminated surface, such as white paper in sunlight, is not in any way dependent on the color of the object we look at, but upon the amount of light thrown upon the retina; either by the greater or lesser intensity of light in the object itself, or by the amount of time during which one looks at it.

2. The succession of colors the image undergoes in forming and fading follows the order of colors of the solar spectrum.

3. That the image is intermittent if the exciting object is looked at with one eye

only and intermittent in color if it is looked at for a certain interval with one eye, and then for a similar interval with both.

Anatomy.

PERSISTENT OMPHALO-MESENTERIC REMAINS; THEIR IMPORTANCE IN THE CAUSATION OF INTESTINAL DUPLICATION, CYST-FORMATION, AND OBSTRUCTION.—The pouch-like formation of intestine occasionally seen projecting from the lower portion of the ileum, is universally known as Meckel's diverticulum. Not that this distinguished anatomist was its discoverer, but to him we owe not only the almost universal acceptance of his theory of the origin of the pouch in question, but are also indebted to him for calling conspicuous attention to its importance in the causation of serious diseases. In an instructive and elaborate article in the July number of *The American Journal of the Medical Sciences*, Dr. Reginald H. Fitz, of Boston, considers this whole subject and points out that the view—that most, if not all well-authenticated instances of duplication of the intestinal tract, at any part of its course, are the probable result of the persistence and growth of the remains of the vitelline duct—is rendered highly probable from what is known concerning the development of the intestine. Attention is called to cystic dilatation of the diverticulum. These retention cysts, as they are called, may have their cavity continuous or discontinuous with the intestine. Moreover, such cysts of possible intestinal origin are not limited to the intestinal cavity, having been observed in the vicinity of the œsophagus, in the abdominal walls, in the vicinity of the umbilicus. The clinical importance of these cysts is duly considered.

Dr. Fitz points out that the vitelline duct is composed not only of layers of tissue equivalent to those forming the coats of the intestine, but it is also accompanied by blood-vessels. The relation of these omphalo-mesenteric vessels or their remains to intestinal strangulation is fully discussed and the importance of bearing in mind the congenital nature of certain of the causes of acute intestinal obstruction is earnestly insisted upon. Dr. Fitz finds that—

1. Bands and cords as a cause of acute intestinal obstruction are second in importance to intussusception alone.

2. Their seat, structure, and relation are such as frequently admit their origin from obliterated or patent omphalo-mesenteric vessels,

either alone or in connection with Meckel's diverticulum and oppose their origin from peritonitis.

3. Recorded cases of intestinal strangulation from Meckel's diverticulum, in most instances, at least, belong in the above series.

4. In the region where these congenital causes are most frequently met with an occasional cause of intestinal strangulation, viz., the vermiform appendage, is also found.

5. It would seem, therefore, that in the operation of abdominal section for the relief of acute intestinal obstruction not due to intussusception and in the absence of local symptoms calling for the preferable exploration of other parts of the abdominal cavity, the lower right quadrant should be selected as the seat of the incision.

The vicinity of the navel and the lower three feet of the ileum should then receive the earliest attention. If a band is discovered, it is most likely to be a persistent vitelline duct, *i. e.*, Meckel's diverticulum, or an omphalo-mesenteric vessel either patent or obliterated, or both these structures in continuity. The section of the band may thus necessitate opening the intestinal canal or a bloodvessel of large size. Each of these alternatives is to be guarded against, and the removal of the entire band is to be sought for, lest subsequent adherence prove a fresh source of strangulation.

Nervous Diseases.

SPINAL INJURIES AS A BASIS OF LITIGATION.—Dr. E. C. Spitzka (*Am. Jour. Neur. and Psycho.*) read a paper on the above subject before the society, with the following conclusions:

1. Spinal injuries, entailing, as they do, unparalleled suffering and disability, are pre-eminently proper grounds for a claim for compensation at the hands of those who, through negligence, are responsible for their occurrence.

2. Inasmuch as the previous existence of a neurotic state, such as hysteria and hypochondriasis, may be responsible for many disease phenomena ensuing after railway and other shocks, allowance must be made in favor of the defendant to such an extent as it can be reasonably inferred that he is not responsible for the plaintiff's disorder. The same presumption and allowance should be made in case the plaintiff is shown to have suffered from syphilis or any other affections, such as certain pelvic disorders in females,

which predispose to the development of spinal disease.

3. It is an interesting question whether the burden of proof as to the existence or non-existence of previous disease, which may mitigate damages, should lie with the plaintiff or with the defendant.

4. The presumption in the case of a litigant asserting the existence of disease of the spinal cord, is that he is really a sufferer. The question of simulation should always be raised where the direct proof of an alleged disorder is not satisfactory; but the burden of such proof should rest with the defendants, and every litigant in such cases should be considered a sick man till he is proven to be a sham.

5. Every attendant circumstance of an accident, or of violence leading to alleged spinal injury, should be made a part of the trial record. I find it difficult to understand, from a medical point of view, what the philosophy of the ruling of an eminent judge in the Harrold case was, when he ruled out, as inadmissible, evidence relating to the rapidity of the train before the collision.

6. The sooner corporations show an inclination to admit the claims of honest claimants for compensation, and to contest complaints on their merits, in short to limit themselves to methods which do not smack of chicanery, the sooner will the public, the press, courts, and juries be able to recognise, and willing to condemn, improper claims, and to brand and to prosecute those who endeavor to coin capital out of the misfortunes of others by the fraudulent pretense of spinal disease.

FUNCTIONAL COMPENSATION OF THE CEREBRAL CORTEX.—Dr. Bianchi (*"La Psichiatria," The Brain*), presents a very elaborate study of this subject:

1. Recovery from the paralysis of the motor zone in dogs is only apparent and partial, only locomotion and acts correlative therewith being restored. Every other movement in different conditions remains permanently abolished, and power is permanently diminished.

2. The parts surrounding the excitable points of the motor zone of limbs may, to a certain extent compensate the functional power of the part destroyed, though without acquiring electric excitability when acting upon the parts whose center has been removed.

3. Locomotion is not determined by spe-

cial centres in the brain of dogs; in these animals the cortical motor zone may be destroyed without any lasting disturbance in locomotion.

4. In dogs, when the motor zone of one side has been widely destroyed, the opposite hemisphere and especially its motor zone exerts a controlling power upon the limbs of both sides.

5. If during the period of development, the cerebellum has been in great part destroyed, the cortical motor zone may in dogs perform its functions.

In the consideration of the questions suggested by this last proposition, the doctor gives the following replies:

a. The fibres of the retina of each eye go in large part to the cortical centre of the opposite hemisphere, but to a smaller extent to that of the hemisphere of the same side.

b. The cortical visual centre of dogs is very extensive, comprising all of the second external convolution, from its anterior extremity as far as the occipital lobe close to the latter, and part of the first and third external convolutions.

c. Compensation is made in the portion remaining entire when the cortical centre of the same side has been partially destroyed. It is very doubtful whether the centre of the opposite side contributes thereto.

DISTRIBUTION OF ANÆSTHESIA IN DISEASES OF THE BRACHIAL PLEXUS.—Dr. James Ross (*The Brain*, part xxv., page 61, etc.) presents the histories of a considerable number of cases in which one or more of the cutaneous nerves of the brachial plexus had been completely divided, and remained ununited; from these he concludes:

1. That one of the principal nerve trunks of the brachial plexus may be completely divided without giving rise to complete anæsthesia in any part of the area of distribution of the sensory branches of the nerves; and that when complete anæsthesia does occur, the portion of the skin affected is very limited, and even the area of the skin affected with partial anæsthesia is usually much less than that of the district corresponding to the anatomical distribution of the nerve.

2. That, as a general rule, the anæsthesia caused by division of one or more cutaneous nerves tends to become progressively less in degree and extent with the lapse of time. From this it follows that in division of one or more cutaneous nerves, the area of normal sensibility tends to encroach upon the anæ-

thetic districts, so that when one nerve is divided its area of distribution, as judged by the extent of the anæsthesia, appears to be very small, while, when it is the only one of the three principal nerves of the hand that is spared, its area of distribution, as judged by the extent of area of normal sensibility, appears to be unusually large.

3. That the degree, extent, and even localization of the anæsthesia caused by division of any nerve differ greatly in different cases, without our being able to discover anything in the nature of the injury to the nerve, or in the external circumstances of the patient which would account for these differences.

UNILATERAL SWELLING OF HYSTERICAL HEMIPLEGIA.—Dr. S. Weir Mitchell records in the July number of the *American Journal of the Medical Sciences* three cases of hysteria, in which there was unilateral increase in bulk, at or near the menstrual period, and also at other seasons, after emotional excitement, and he has been unable to find elsewhere any narration of similar cases. Whatever conclusions we may reach as to the immediate cause of the unilateral differences in size, which Dr. Mitchell has here described, it is at least clear that they are under the influence of the nervous system, and vary with the causes which also increase or lessen the analgesia or give rise to chronic spasm. Beyond this Dr. Mitchell can as yet hardly go. Most probably, he thinks, it will be found that in many unilateral hysteric palsies a like phenomenon exists, and has merely escaped attention because of being the least prominent in a group of symptoms. At all events, it adds another to the large group of resemblances which so closely relate organic to hysteric hemipalsy.

CAN LOCOMOTOR ATAXIA BE CURED.—Dr. G. M. Hammon (*Boston Medical Journal*) considers at length this question, and concludes:

1. The absence of the patella tendon reflex in locomotor ataxia is not always caused by sclerosis of the posterior columns.

2. Sclerosis of the posterior columns may exist without being accompanied by the ordinary prominent symptoms of ataxia.

3. Congestion of the posterior half of the spinal cord may give rise to most, if not all, of the symptoms of locomotor ataxia.

4. It is impossible during life to make a differential diagnosis between posterior spinal sclerosis and posterior spinal congestion.

5. Posterior spinal congestion is curable.

6. There is no evidence to show that sclerosis, once existing in the spinal cord, has ever been removed.

7. Those cases of so-called locomotor ataxia which have been cured are simply cases of spinal congestion, more profound in the posterior columns of the cord.

TREATMENT OF MIGRAINE.—Dr. Morton (*Jour. Men. and Ner. Dis.*) recommends for headaches due to anæmia, large doses of bromide of sodium, 60 grains to begin with, and repeated in an hour and a half if relief does not follow. The patient who is subject to these attacks is then to be put upon 15 gr. doses three times a day, for from three to six months, and to take tonics as well.

Nitrite of amyl and nitro-glycerine are also very useful. Better results are obtained from the latter if given after meals.

In the angio-paralytic type he thinks strychnine in increasing doses, until the full physiological action is obtained, is very beneficial, but that ergot is the chief remedy in this form.

TREATMENT OF LOCOMOTOR ATAXIA.—Dr. Jewell (*Jour. Men. and Ner. Dis.*) is of the opinion that the most important single factor in the treatment of locomotor ataxia, is rest, absolute rest. He has treated several cases in this manner with the best of results. Systematic massage is also carried out, and besides, the surface was protected both day and night, so as to keep the temperature equable. He also uses remedies externally, such as iodide of potassium, etc.

Diseases of Children.

LEEDS ON INFANT FOODS.—This is an important subject. It is but little understood even now. Hence all contributions to it are welcome. The latest is from the pen of Prof. Leeds, Ph. D. (*Med. News*). He tries to establish the following points:

1. Cow's milk is in no sense a substitute for woman's milk.

2. Attenuation with water alone is inadequate, and chemical metamorphosis, or mechanically, the addition of some inert attenuant is required in order to permit the ready digestibility of cow's milk by infants.

3. The utility of manufactured infants' foods is to act as such attenuants, and as such they take the place of simple barley and oatmeal water, the sugar cream, baked cracker, arrowroot, etc., etc., used in former times.

4. The results of both chemical and physiological analysis are opposed to any but a sparing use of preparations containing large percentages of starch.

5. It is eminently probable that besides acting as attenuants, the matter extracted in the preparation of barley and oatmeal water, and still more the soluble albuminoid extractives obtained at ordinary temperatures, by Liebig's process, have a great independent value of their own. For this reason, instead of employing starch, gum, gelatine, sugar, etc., the use of a natural extractive containing saccharine and gummy matters and soluble albuminoids as well, such as Liebig advocated, is in accordance with the development of science since his time.

6. The use of food made up of equal parts of milk, cream, lime water, and weak arrowroot water, as practised for years by the late Dr. J. F. Meigs, is sustained by theory, analysis and practice. It provides for the increase of fat to an amount comparable with that found in human milk. It adds alkali to permanent reaction, and to convert caseine into soluble albuminates. It adds a little bland attenuant. And if in addition the amount of sugar of milk were raised, and instead of arrowroot water, barley or oatmeal water were substituted as the case demanded, it would approach still more nearly to the conditions required.

7. The perfect solution of the present problem is to be found in the modification of cow's milk by chemical processes, so as to make it physiologically the equivalent of cow's milk. The nature of these processes and the results to be obtained, are at present so nearly wrought out, that there is good reason for believing that such a solution of this problem is not far distant.

MALARIA IN CHILDREN.—Dr. Holt (*Amer. Jour. Obstet., Boston Med. and Surg. Jour.*) sums up the results of investigations in one hundred and twenty-eight cases of this disease in children as follows:

1. Malaria in early life presents symptoms peculiar to that period, and differs from the same disease in adults as widely as does pneumonia.

2. The classification of cases as remittent or intermittent, and the division into hot, cold and sweating stages as in adults, leads to misapprehensions regarding the course of the disease and confusion of diagnosis.

4. In any acute febrile disease presenting an unusual course, the spleen should always

be examined, especially in a district as malarial as New York.

4. In obstinate cases of diarrhoea or bronchitis not affected by ordinary remedies, especially if these symptoms show a tendency to periodicity, malaria should be investigated as a possible cause.

5. Spells of drowsiness and frequent attacks of epigastric pains should always excite suspicion.

6. In children it is even more necessary than in adults carefully to interrogate every organ before making a diagnosis where the symptoms are at all obscure.

ACUTE RHEUMATISM IN CHILDHOOD.—Dr. Vohsen (*Lond. Med. Record*) formulates our present knowledge of this disease thus:

1. In almost half the cases of rheumatism of joints there occur endocarditis, and later, valvular defects.

2. The mitral valve and the pericardium appear to suffer most frequently, and endocarditis is usually developed in the first week of the disease.

3. Whilst salicylate of soda exerts a most beneficial effect in relieving the affections of the joints, it has no influence on the course of the heart complications.

4. The mildest form of rheumatism of joints, as shown by slight fever, little swelling, and very transient pain, seems especially to predispose to heart complications, and hence indicates the necessity for careful examination in the mildest cases.

He seems to regard this disease as infectious.

What determines the heart complications in acute rheumatism still remains most uncertain. No reason can be assigned on anatomical or physiological grounds.

Gynecology.

THE MANAGEMENT OF ACCIDENTAL PUNCTURE AND OTHER INJURIES OF THE GRAVID UTERUS AS A COMPLICATION OF LAPAROTOMY.—Dr. Chas. C. Lee, of New York, (*Amer. Jour. of Obstet., Amer. Gynecol. Soc.*) after reviewing the literature of seven cases, including one of his own, on the above subject, comes to the following conclusions:

1. The pregnant womb may be punctured or otherwise wounded during laparotomy without necessarily causing abortion.

2. Miscarriage seems *a priori*, and from clinical evidence, to depend upon injury of the uterine contents, not of the womb itself, however severe.

3. If the former has certainly occurred, cesarean section is indicated, and should be properly performed. In this case the utmost care must be subsequently taken to secure drainage from the uterine cavity.

4. If the uterine walls alone are injured, the wound is to be treated on general principles. If a deep puncture or incision, it must be sutured with the greatest care with exact co-aptation of the edges. For this purpose, fine silk sutures rendered antiseptic are the best. If it be an injury of the neck or a superficial puncture, it must not be ligated, for ligatures cut quickly through uterine tissue. If too small to be sutured, the bleeding points must be lightly touched with the thermal cautery until oozing has ceased. Good surgery and the dictates of humanity, alike demand that under such circumstances a chance for survival be given the child as well as the mother.

IS EXTIRPATION OF THE CANCEROUS UTERUS A JUSTIFIABLE OPERATION?—Dr. A. Reeves Jackson, of Chicago (*Am. Gynec. Soc., Amer. Jour. Obstet.*), in a paper read before the American Gynecology Society, shows that this is *not* a justifiable procedure. The author believed that diagnosis of the earliest stages of cancer, in the present state of our science, is absolutely impossible. That partial operations are injurious in many ways. That the mortality is very high, and in closing the paper endeavored to show:

1. That diagnosis of uterine cancer cannot be made sufficiently early to insure its complete removal by extirpation of the uterus.

2. When the evidence can be established, there is no reasonable hope of effecting a radical cure, and other methods of treatment, far less dangerous than excision of the entire organ, are equally effectual in the amelioration of the suffering, and retard the progress of the disease and prolong life.

3. Extirpation of the uterus is highly dangerous, and never lessens suffering, except in those whom it kills, and does not give a reasonable promise of recovery, and should not be adopted in modern surgery.

CONCERNING UNCONTROLLABLE VOMITING OF PREGNANCY.—Horwitz (*Ztsch. f. Gyn., Band IX., Heft I., Am. Jour. Obstet.*) lays down the following propositions:

1. The uncontrollable vomiting of pregnancy begins most frequently between the tenth and eleventh weeks.

2. It seldom comes without premonition.

3. A series of phenomena pertaining to the

digestive apparatus usually precedes, most noteworthy of which is nausea.

4. Nausea is apt to begin in the third or fourth week of pregnancy.

5. There is a fixed relation between the nausea and the vomiting of the pregnant state, the longer the one, the shorter the other, usually.

6. As to the severity, the severer the attack of nausea, the shorter the duration of the period of vomiting.

7. Ordinarily, vomiting of the pregnant is not similar to that which occurs in the different diseases of the stomach. The former comes on easily and without pain.

In regard to treatment he offers nothing beyond the usual remedies.

Dr. Garrigues (*Trans. Obstet. Soc., N. Y., Jour. Obstet.*) reports that it is a very serious matter to puncture an ovarian cyst with a hypodermic needle, especially when the contents are known to be undergoing decomposition, as some of the fluid may escape into the peritoneal cavity and set up inflammation. It is very much safer to make the puncture with a trocar and withdraw the entire contents. Then the wound has ample time to heal before there could be sufficient reaccumulation to distend the sac and escape through the opening.

Obstetrics.

MICRO-ORGANISMS AND PUERPERAL FEVER.

—Dr. Carl Lomer (*Amer. Obstet. Jour.*, July, 1884,) concludes the presentation of interesting facts thus:

1. Of all micro-organisms found in puerperal fever, the chain-like micrococci seem to be those to which we should especially direct our attention, and to which we should attach the greatest importance.

2. When in any case of puerperal fever their presence has been detected in the exudations, they have been found in the deeper organs.

3. They have been found in erysipelas, scarlet fever, diphtheria, and puerperal fever, and in each possess the same form, and show the same disposition towards fertilizing fluids and coloring matters.

4. Although it is very probable that different varieties do exist among these diseases, we as yet have no positive proof of the fact.

5. A differentiation according to size is an extremely difficult, perhaps hopeless task, but according to the manner of growth it may be possible.

6. Vaccinations with cultivations of these micrococci from different diseases has proved fatal to animals, but has given no typical or characteristic results.

7. Chain-like micrococci have also been found in infected wounds and in the blood of pyæmic patients.

8. The pathologico-anatomical investigations thus show that these clinically related diseases (puerperal fever, erysipelas, diphtheria, scarlet fever and pyæmia) possess similar micro-organisms.

9. Besides the chain-like form other micro-organisms may be present in puerperal fever.

10. The presence of these latter in the cadaver does not always prove that they existed in the living body; on the contrary, they are often the result of post mortem decomposition.

11. It is probable that the processes of decomposition are sometimes present before death actually takes place, different varieties of micro-organisms therefore found, for instance, during the death struggle may have nothing to do with the cause of the disease.

12. It is yet impossible to classify puerperal fever, as regards course and prognosis, according to the varieties of micro-organisms found or according to their mode of invasion.

13. In some cases no micro-organisms have been found, but this does not prove that they do not exist.

ALBUMINURIC RETINITIS OF PREGNANCY.—

Dr. Ryerson, of Toronto, writes (*British Medical Journal*):

"Mrs. E., aged 22, was referred to me by Dr. Temple on June 1st, 1881, with the statement that the urine contained a large amount of albumen. The patient stated that her sight had been failing for about a month. She said she could see the sides of an object, but not the center; and complained of flashes of light in the dark. She had frontal headache, sometimes severely. She had no pain in the eyes. There was a great deal of nausea and vomiting. She was in the fourth month of her first pregnancy. With the right eye, she saw fingers at five feet, and read 16 Jäger; with the left, she saw fingers at three feet, and read 20 Jäger. With the ophthalmoscope, I observed, in the right eye, a well-marked stellate arrangement of deposits about the yellow spot, with numerous patches scattered about the retina. The optic disc was somewhat swollen and indistinct in its outline. The appearances in the left eye were very

similar, with the addition of numerous small hæmorrhages in the lower half of the fundus.

"Dr. Temple informs me that, shortly after this, she was seized with convulsions, and had a miscarriage. She made a good recovery; and, when I saw her again on August 4th, the swelling of the optic disc had greatly diminished, the scattered patches were less marked, but stellate patches in the region of the macula were about the same as when first seen. In the right eye, two veins apparently contained thrombi. The vision was, with the right eye, $\frac{3}{8}$, 16 Jäger; with the left eye, $\frac{3}{8}$, 16 Jäger. She could manage to write a letter. From Dr. Temple I learn that she regained good vision, but did not myself see her again. In a few months, the unfortunate woman became pregnant again, although warned of the danger; convulsions supervened, and in one of them she died.

"*Remarks.*—It would be of considerable interest to learn in what proportion, and in what class of cases of albuminuria of pregnancy, retinitis occurs. That it does not necessarily occur, I know, having attended, some years ago, two cases in which there was no complaint of trouble of vision. One case, a woman of about thirty years, in her fourth pregnancy, made a good recovery. The other had uræmic convulsions, and died. I did not use the ophthalmoscope, but relied upon the patient's statements, the cases having occurred in my pre-ophthalmoscopic days."

A CASE OF MONSTROSITY.—Dr. Raverty describes the following case of a sireniform fœtus (*Brit. Med. Jour.*):

"I was called to attend Mrs. E. in her fourth confinement, on May 9th, 1883. On my arrival I found the water had come away about twenty minutes before, and projecting from the os externum was a fleshy mass so unlike any usual presenting part of the fœtus to the touch, I was quite at a loss what to make of it. However, another pain coming on solved the riddle at once, the feet and leg or legs being expelled; and in a short time the shoulders and head followed. The child was alive and continued so for eight hours. The mother made a good recovery. From the head downwards to about midway between the sternum and the umbilicus it was in every respect well-formed, and to outward appearance perfectly natural. From about that point the following particulars were noticed: There were no projections at the usual site of the crests of the ilia. The abdominal cavity was small, and seemed to be al-

most destitute of contents. The genito-urinary organs were represented by a small round aperature surrounded by a slightly elevated fleshy ridge. The limbs were enclosed in one continuous fold of integument, although the bones could be felt quite separate underneath; and in front there was a slight depression marking where the division ought to have been between the limbs. There was no separation of the buttocks; in fact, there was very little of the usual projections at this point, and there was no anal orifice. The feet were joined together at the heel and partially so at the center of the foot, but the toes were well formed, in the usual number, and free. I would have liked a *post mortem* examination, but the parents objected. The mother said she had only gone eight months. There was no history of a fall or fright, except a bad dream about the fourth month."

PUERPERAL SEPSIS.—Dr. W. H. Ford (*St. Louis Courier of Medicine*, June, 1884,) concludes an elaborate paper upon puerperal sepsis thus:

He does not believe in the existence of an essential puerperal fever. What has been called by this name he regards as an intensified septicemia or a malignant expansion of a febrile process.

From these principles he deduces the rules for preventing post partum inflammation, a septic state of the lochia and its absorption.

These rules are very complicated but are essentially thus:

Everything must be avoided during pregnancy that interferes with the general health of the body or mind. During labor there must be no needless interference. The uterus must be promptly contracted and the woman made perfectly quiet. The uterus and vaginal canal must be kept free from organic debris. All injuries must be speedily repaired. He does not think that it is needful to enter upon all the details recommended by Dr. T. G. Thomas in his paper before the New York Academy of Medicine last winter.

Otology.

CASE OF FOREIGN BODY IN THE EAR NEARLY TWENTY YEARS.—Dr. Lucius Holland (*Brit. Med. Jour.*), describes the following case: "A woman, aged 27, came to the dispensary complaining of frequent headache and giddiness. According to my custom in these cases, the ears were examined, and a black mass of cerumen

being visible in the right ear, she was referred to my clinic for diseases of that organ. Some difficulty being experienced in clearing the canal, a probe was employed, which at once came into contact with a hard body; and its impaction required the further use of forceps for removal. This body upon examination, was found to be metallic, in the shape of a grape-stone, with very sharp apex, and weighing twelve grains. It was kindly tested for me by Mr. Leopold Dean, analytical chemist at Sir William Armstrong & Co.'s, and proved to be a globule of iron. The patient had lived in the neighborhood of iron-works from the age of three until ten years, and as a child played and rolled in the sand. During the latter part of this time she suffered from pain in the right ear, for which the workmen puffed in tobacco smoke. At the age of ten years she was removed from that locality, and since then has resided in such places that no opportunity has been afforded for the introduction of such a body, besides having no recollection of any thing of the kind happening during the seventeen years. The globule of iron will, therefore, have been in the ear nearly twenty years. It was imbedded in dense cerumen, occupying the deep part of the canal, the circumference of which I observed to be irritated, the membrana tympani was somewhat depressed and thickened, with alteration of the "cone of light." Hearing has not diminished, and since the removal of the foreign body the giddiness and headache have ceased. After the age of ten years the earache subsided as the calibre of the canal increased. This case may be regarded as a most remarkable instance of a dangerous foreign body remaining for years in the ear without serious and alarming consequences.

THE TREATMENT OF ONE EAR AS INFLUENCING THE OTHER.—A Fitelberg (*Arch. of Otolaryngology*, Dec. 1883,) concludes an extended study of this subject thus:

1. The treatment of one ear causes a distinct improvement in the hearing of the other, in a large proportion of cases; it rarely causes a diminution of hearing.
2. The greatest improvement in the hearing on the side that had not been treated was noted in cases of unilateral, acute or chronic suppurative inflammation of the tympanum. It was additionally discovered that the hearing power on the side not treated, presuming of course, that the disease had not invaded that ear, could be restored to the normal

amount before the morbid process on the affected side had run its course.

3. When both ears are affected, the treatment of either one exclusively often produces an improvement in the other, and this not merely so far as concerns the hearing, but as concerns any subjective noises that may have been present.

4. In most cases which were under observation the ear that had not been treated did not generally return at once to a normal condition, but only after a moderate lapse of time, while on the contrary,

5. In other cases the hearing which had at first been improved in the one ear by treatment of the other gradually decreased in the course of observation.

The explanation of these facts is readily made from Urbantschitsch's observations. He has shown that irritation of the sensitive fibres of the trigeminus of one side can exercise upon all the sensitive perceptions, not only of the side affected, but also of the opposite side, an influence which makes itself felt in most cases by an increase, and in a few others by a decrease in the acuteness of these perceptions. It is fair to suppose that the influence of one ear upon the other is purely a reflex action. The effects upon the trigeminus of one side are transmitted to the acoustic center and thence to the opposite ear.

THE EFFECTS OF NOISE UPON DISEASED AND HEALTHY EARS.—Dr. Roosa (*Arch. of Otolaryngology*) presents a very elaborate discussion of this question, from which he concludes:

1. There is a large class of persons suffering in quiet places from impairment of hearing, who hear very acutely and with comfort amid a great din or noise.
2. The disease causing the impairment of hearing thus relieved is situated in the middle ear. It is usually observed in the chronic, non-suppurative form of disease of the middle ear, but it may also be found in acute or sub-acute catarrh of this part, as well as in the chronic suppurative process with loss of the whole or part of the membrana tympani.
3. The proximate cause of this phenomenon is not as yet positively known. It is probably to be found in some change in the action of the articulations of the ossicula auditus.
4. The hearing power of persons working in such a din as that of the boiler shop invariably becomes impaired.
5. The lesion caused by this occupation is

one of the labyrinth or of the trunk of the acoustic nerve.

6. Persons thus affected do not hear better in a noise. Their hearing power is better in a quiet place, and becomes better after prolonged absence from the existing cause of their impaired hearing.

7. The cases of inspissated cerumen, catarrh of the middle ear, occurring among boiler makers, are such as occur among those employed in various occupations and only mask and complicate the fundamental primary trouble, so long known as boiler maker's deafness.

8.—In diseases of the labyrinth or acoustic nerve the tuning fork "C" is heard louder and longer through the air than through the bones of the head.

CONCLUSIONS FROM EXTENSIVE OBSERVATIONS OF EAR DISEASES.—Dr. K. Buskner in a very elaborate paper in *Archiv. fur Ohrenheilkunde* gives the results of his clinical observations and those of twenty other aural surgeons. From these he finds that on an average out of every three individuals in middle life one does not hear so well in one ear as in the other, while from an examination of five thousand nine hundred and five school children twenty three per cent. presented objective pathological symptoms of ear disease and thirty-two per cent. a diminution of hearing power. The following general nonclusions are drawn from this immense mass of detail:

1. The most frequent causes of diseases of the ears would seem to be attacks of cold, affections of the nasal and pharyngeal cavities and acute infectious diseases.

2. The liability to diseases of the ear increases from birth to the fortieth year and decreases from thence to old age.

3. Men are more subject to affections of the ear than women, as three to two.

4. The external ear is affected in twenty-five per cent, the middle ear in sixty-seven per cent, and the inner ear in eight per cent. of the total number of diseases of the ear.

5. The left ear is more frequently affected than the right, as 5 to 4.

6. The acute affections of the middle ear occur less frequently in the summer and autumn than in spring and winter.

7. Of the total number of cases of ear disease in the out-patient clinics about fifty-three per cent. are cured, about thirty per

cent. are improved, seven per cent. are unimproved and three-tenths of one per cent. terminate fatally.

WHAT INFLUENCE HAS THE TREATMENT OF ONE EAR UPON THE OTHER?—Eitelberg (*N. Y. Med. Jour.*) formulates his views on this subject thus:

1. In many cases the treatment of one ear causes an improvement in the hearing of the other ear, which has not been treated, while a diminution of the hearing power is very rarely produced.

2. The greatest difference in favor of the improvement of hearing in the ear not treated occurred in cases of one-sided acute or chronic otitis media purulenta with defective hearing on the other side.

3. In disease of both ears, when only one ear was treated, an improvement very often appeared in the other ear, not only in respect of the hearing power, but also in respect of the existing subjective noises.

4. In many cases an improvement, and even complete restoration, of the hearing power appeared in the ear not treated, not immediately upon the treatment of the other ear but some time after.

5. In some cases, after a certain time had elapsed, the improvement in the hearing subsided and the ear returned to its former condition.

OTHÆMATOMA.—Sockeel* finds that othæmatoma is not specially an affection of the insane. It may be the direct consequence of traumatism, but in the majority of cases it is preceded by an inflammatory or hypertrophic degeneration of the fibro-cartilage, which are the predisposing causes, aural congestion being an exciting cause. The sanguineous effusion occurs between the perichondrium and fibro-cartilage. It sometimes originates in the thickness of the latter. In the insane it is evidence neither of cachexia nor incurability. It is a benign affection, but has the inconvenience of being followed up after recovery by more or less marked changes in the aural pavilion. From a forensic standpoint it is of no importance. The patient recovers from it without treatment, but with more or less aural deformity. Incision of the tumor diminishes the duration of the affection and extent of the deformity.

* Recueil de Memoires de Médecine de Chirurgie et de Pharmacie, November, 1882.

DEAFNESS IN HYSTERICAL HEMIANÆSTHESIA.—Dr. G. L. Walton (*The Brain*, Jan., 1883), from an extended discussion of this subject concludes:

1. The sensibility of the deep parts of the ear, including the tympanum and middle ear, disappears in hysterical hemianæsthesia with that of other parts of the body, and in the same degree.

2. The degree of deafness corresponds with that of the general anæsthesia, being complete when the latter is complete, and incomplete when the latter is incomplete.

3. When the loss of hearing is incomplete, the deafness for sounds conveyed by the bone exceeds that for sounds conveyed by the air.

4. When the transfer is made, the hearing as well as the general sensibility of the deep parts of the ear, improves on one side exactly in the same degree in which it disappears on the other.

Ophthalmology.

BLINDNESS PREVENTED BY PREMATURE DELIVERY.—Dr. E. G. Loring (*N. Y. Med. Jour.*), concludes a presentation of his observations thus:

1. That examinations as to the conditions of the eyes of pregnant women should be made much more frequently than they now are; and that these should be made in a routine manner, even when the patient does not complain of any disturbance in vision, since it has been discovered that about one-third, or thirty-three per cent. of those who have an organic lesion of the retina or optic nerve, from kidney trouble, either have none, or make no complaint of any reduction of vision. This seems almost incredible to the general practitioner, but the ophthalmologist has become only too painfully aware how often, and for how long a time, eyes may be affected with an inflammatory process of great intensity, and yet give rise to no complaint on the part of the patient. Thus, a retinitis or neuro-retinitis, which in its primary stage may exist, and often does, for months, unsuspected by either the patient or physician, may lead, after a long interval, through the secondary or atrophic state to complete blindness.

From the fact that no complaint is made of any loss of sight until near the end of the pregnancy, it has been assumed that the trouble did not begin until that time. I am

inclined to think, however, that, this is strictly true, especially in those cases dependant on albuminuria, in which the trouble really began long before; and that the eyes, if examined, would often have given evidence of disease, long, oftentimes months, before the explosion took place, which has cost many a mother her eyesight, and oftentimes her life, both of which, by a timely examination and timely operation, might have been saved. I will even go so far as to say that I believe that evidences of albuminuria not infrequently show themselves in the eye before any manifestation can be had in the urine.

It will be said at once that it is requiring too much of the general practitioner or obstetrician to expect that he shall acquire the requisite skill to use so difficult and intricate an instrument as the ophthalmoscope. That the ophthalmoscope, in its widest sense, is one of the most difficult of the instruments used for the detection of disease is, I admit, perfectly true, as it is that few obtain a perfect mastery over it. But the same is true of the microscope. To one great microscopist there are thousands who daily use the instrument with the greatest success in the detection of disease, and it might, with a little attention, be the same with the ophthalmoscope. Much as I admire the high standard of skill which some of those specially trained to its use naturally acquire, nevertheless, I firmly believe that the sphere of its greatest usefulness, and therefore of its greatest triumphs, will one day be in the hands of the general physician, and especially in those of the obstetrician. Thus, Mr. Eales reports that a single physician was able to furnish him for examination, from a single hospital in Birmingham, twenty-eight cases of neuro-retinal disease from kidney trouble in one year, while out of 11,000 cases of general eye-diseases, in the eye infirmary, only four such cases were seen.

2. I would conclude that when a marked deterioration of vision has occurred, with or without ophthalmoscopic changes, and where blindness is threatened, premature delivery is not only justifiable, but often demanded.

3. When a permanent loss of vision has occurred from a preceding pregnancy, premature delivery in a subsequent one, when surrounded by its proper safeguards, is not only justifiable, but at times absolutely necessary, and that, further, when a loss of vision, either temporary or permanent, has once resulted from gestation, it is the duty of the family

physician or obstetrician to explain, both to the wife and the husband, that the cause of the trouble is a constitutional and not a local one, and that there is every probability of recurrence of the trouble in succeeding pregnancies which may lead, not only to destruction of vision, but even to loss of life.

CAUSES OF SENILE CATARACT.—These are given by Deutschmann (*Ophthalmic Review*), as follows:

1. The process of sclerosis in the senile lens is accompanied by a loss of water, which can be proved by actual weighing, and so measuring the percentage of water in the lens.

2. The living lens is continually surrounded, within its capsule, by the thinnest possible layer of fluid albumen, and it is probably through this that the processes of nutritive interchange are carried on between the lens on the one hand, and the vitreous and the aqueous on the other. From the vitreous the lens receives albumen, returning in exchange water and salts, while from the aqueous it receives water and gives in exchange salts and a small amount of used albuminous material.

3. The cause of the permanent transparency of the living lens lies neither in the anterior capsular epithelium, nor in the capsule, but must be ascribed to the vital qualities of the lens itself; no explanation of it can be given yet. In the dead lens opacity is produced by swelling and destruction of the fibres, and albumen is yielded up in increased quantity to the aqueous humor.

4. The opaque cortical substance of the senile cataract contains a considerably higher proportion of water than does transparent lens matter of equal age, provided the cataract is not over ripe and shrunken.

5. The solid constituents of senile cataract are proportionately diminished as compared with those of the non-cataractous lens of equal age.

6. During the ripening of senile cataract the aqueous humour is richer in albumen than the normal aqueous.

7. Injection of albuminous serum into the anterior chamber of living rabbits does not produce cataract.

8. Hence follows the conclusion that the increased proportion of albumen which is present in the aqueous humour during the formation of senile cataract, is the result, and not the cause, of the cataract.

9. Naked eye and microscopic changes

identical in character with those characterising senile cataracts, can be experimentally produced in the freshly excised and decapsulated human lens by exposing it to the gradual action of watery vapor.

10. The consistence of senile cataract, and the length of time occupied in its development, depend upon the extent to which the cortical substance possesses the faculty of swelling.

11. Clinical experience and experiment show that this faculty varies widely.

12. Comparative examinations of the senile, shrunk, over ripe cataract and of a normal lens of the same age, show a decrease in the former both of water and of solid constituents.

CHANGES IN THE FUNDUS OCULI CAUSED BY CERTAIN DISEASES OF THE LIVER.—Litten (*Zeitschr. f. Klin. Med.; N. Y. Med. Jour.*) has been making some investigations into the changes produced in the fundus of the eye by certain diseases of the liver, with the following results:

1. In all the various diseases of the liver which are complicated with icterus, retinal hemorrhage occur, not infrequently, and these must be regarded as symptomatic of other widely extended hemorrhagic processes occurring in many of the internal organs. These hemorrhages are by no means always to be regarded as of evil omen, for they occur in a comparatively harmless form of catarrhal hepatic inflammation whenever the latter is complicated with icterus. With the latter they stand in close connection. 2. In one case of acute atrophy of the liver from phosphorus poisoning, besides fresh retinal hemorrhages, Litten observed multiple white spots which proved, on microscopic examination, to be fatty degeneration, which were mainly situated in the granule layer, and contained numerous granular bodies and tufts of tyrosin. The capillaries had also undergone fatty degeneration. 3. In two cases of atrophic cirrhosis of the liver, he observed pigmentary degeneration of the retina, which in one of the cases was developed long after the disease of the liver had existed, while in the other it preceded it by a year. In both cases there was marked concentric limitation of the field, with good central vision and general diminution of the visual power under diminished illumination. 4. Hemeralopia sometimes occurs during the existence of a hypertrophic or an atrophic cirrhosis of the liver, without any trace of a demonstrable organic retinal

change. 5. By ligation of the optic nerve, as near as possible to the eyeball, it is possible to produce in the retina processes similar to those Berlin describes as produced by division of the optic nerve, and similar also to those seen in retinitis pigmentosa, atrophy of the cellular elements of the retina, absorption of the pigment of the epithelial layer, and wandering of the same into the innermost layers of the retina. On the other hand, a hyperplasia of the connective tissue, as observed in pigmentary degeneration of the human eye, was almost entirely wanting. 6. Immediately after puncture in a marked case of ascites, a neuro-retinitis with slight swelling of the papilla was developed, with exudation into its tissue and around the vessels. Litten thinks that this was caused by the rapid alteration of the conditions of hydrostatic pressure, in consequence of the rapid withdrawal of the sixteen litres of fluid.

INTRA-CRANIAL DISEASE AND CHOKED

DISC.—Dr. Edward G. Loring contributes to the *New York Med. Jour.*, an article on the nervous connection between intra-cranial disease and choked disc, the conclusions of which are: 1. That the vaso-motor theory, as advanced by Benedikt, is not sufficient to explain the mode of transmission of the morbid irritation within the head, or the resulting neuritis optica. 2. That the irritation is conveyed, not by the isolated fibers of the sympathetic system, as stated by Benedikt, but through the agency of the trigeminus. 3. That choked disc or papillitis, in connection with brain disease, is the expression of an irritation or compression of certain intra-cranial fibers of the fifth pair, which preside over the blood supply of the disc and neighboring parts, and also maintain the healthy processes of waste and repair of the tissues themselves. This being so, he adds, the same analogies and distinctions between "irritation" and "inflammation" can be made here as with sympathetic ophthalmia, so that here, as well as there, the irritation may exist as such for an indefinite time, or may so reduce the vitality and resisting power of the disc and surrounding parts as to develop gradually, or explode suddenly, into an actual inflammation—that is, into a neuritis. The immediate and exciting cause of this neuritis may then be either an external one, such as exposure to cold or heat, over-exertion, either mental or physical, or indeed, too much exposure to light, the effects of which, under the weakened condition of the organ,

may be looked upon as a "traumatism"; or the exciting cause may be an internal one, such as some irritation from the condition of the blood and circulating fluids, either chemical or mechanical, either local or general, which, insufficient in itself to produce any bad effect upon a normal disc, may yet be just sufficient to produce a condition of inflammation in a part that is weakened and irritable.

TREATMENT OF GLAUCOMA.—Pflüger (*Ber. d. Ges.; N. Y. Med. Jour.*), contributes an interesting article upon the treatment of the various stages and forms of glaucoma.

Briefly, the result of his experiments on this subject, upon the healthy eye, are as follows: He has found that atropine always diminishes the tension of the eye, and never increases it. That eserine gradually increases the tension of the eye in from ten to twenty minutes, and that it lasts for a number of hours. He believes that, under physiological conditions, atropine and pilocarpine diminish the intra-ocular tension, while eserine primarily increases it. Pflüger then formulates his therapeutical indications as follows:

1. Every simple glaucoma should first be treated carefully with myotics. If these fail, iridectomy is to be preferred to sclerotomy.
2. In rare cases of subnormal tension, and when there exist only pseudo-excavation and atrophy of the optic nerve, he recommends small doses of eserine.
3. Certain rare forms of acute glaucoma simply should be treated with often-repeated instillations of a two per cent. solution of pilocarpine; and also that very rare form of glaucoma simplex, with abnormality, deep anterior chamber, and increase of tension.
4. Traumatic glaucoma is best treated with eserine, and if this fails, then by iridectomy.
5. Acute and chronic inflammatory glaucoma is at first best treated with eserine, as preparatory to iridectomy.
6. Eserine is to be recommended in absolute, or almost absolute, glaucoma with movable iris.
7. In congenital diseases, with pressure, sclerotomy is to be preferred to iridectomy, preceded and followed by the use of eserine.
8. Secondary glaucoma demands, in the majority of cases, operative treatment, and here a broad iridectomy is the only sure means of relief.

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Original Communications.

The Races.*

BY DR. R. F. WARK.

Returned to the author by the committee on publication for want of space.

Damned with *saint praise* come back a thousand times.
No law can keep a *fool* from building rhymes.

W.

I.

Friends I am pleased to be with you, can you be
quiet and listen,
Listen, if only a moment, to voices and echoes primeval;
Voices that come like a murmur of winds through
the beeches and maples,
So faint that the ear scarcely hears them, so far that
we note not their sources;
We are links in the chain of existence, by the fires
of Omnipotence welded;
We are bubbles that break on the billow, and are lost
in the ocean of waters;
Nay, even whole races have perished and left scarce
a trace of their labors;
No thought of their thinking can teach us, no song
of their singing can please us.
If science they had, it is vanished, covered with darkness
forever,
Faith may have grown in their bosoms, hope in their
hearts may have blossomed;
But of those hopes, faiths or fancies, all that we
know is conjecture,
And of their lives and their labors, all that we know
is, they perished.
Look at the mound in yon valley, lonely and wierd
in its grandeur,
Who has not pondered profoundly, the thought of
its mystical builders?
Look at those ditches and ramparts marking the face
of your country,
Kings may have gazed from their bastions, prophets
sojourned 'neath their shadows;
Look at those animal figures built on the soil of your
prairies,
Who shall unlock the dark secrets veiled in their
hieroglyphics?
Look at those great excavations, mines where they
toilfully labored,
Lahored with sledges and axes wrought from the
greenstone and granite;
Look at the traces of gardens, trenching the Illinois
prairies,
Surely they *were* not and *are* not, the work of the un-
working savage;

He never toiled for an object beyond what the present
demanded;
He never worked for a master, sagamore, prophet or
sachem;
Therefore our land has been peopled by a race not at
all like the savage,
For which race, in our ignorant darkness, we have
no name but mound builders.
Who were this mythical people; whither went they
as they vanished?
Toltects who migrated southward and founded a civil-
ization?
Or older and still ruder nations who died on the soil
where they flourished?
Why did they make those erections? Kings may have
built them for glory,
Raised them above the green valleys to cover the
bones of their kindred.
Priests in their robes sacrificial there may have offer-
ed their victims,
Patrois, soldiers and statesmen, there may have died
for the nation;
Wake, ye old mounds from your silence! Speak, we
would list to your story;
No, the echoes are dead in your cold frozen hearts,
and oblivion seals them forever.

II.

'Tis pleasant in the evening, when the summer sun
goes down,
To listen to the murmurs of a busy prosperous town.
And to watch the population by the evening's ruddy
flame,
For the forms of human happiness are ever much
the same:
So come with me respected friends, imagine that we
go
To see an olden city two thousand years ago;
An old Ohio city that had a place and name,
And flourished in its glory before the red man came.
Along the swift and arrowy stream the fog begins to
flow,
Like fleecy robe of softest wool to hide the waves
below.
The red and scarlet drapery of ivy clings around,
The lyre leaved poplar soon to fling its golden
glories down,
And all across the valley's breadth the kingly rows
of maize
Are ripening their luscious grains, and basking in
the rays
Of Indian summer's gorgeous sun, while stretching
far around,
We mark the curious walls and towers of this most
curious town,
Far as our vision can extend o'er this alluvial soil,
Behold those curious earthen works, those monu-
ments of toil.

* A Paper read before the Ohio State Medical Society.

A circle here, a sacred spot where kings and priests
preside.

Its altar at the center stands, where sacrificial pride
Impels the rulers of the land to light the sacred fire
And incremate their living foes upon the dreaded
pyre;

O man! how horrid are the crimes that thou canst
perpetrate

When superstition blinds the mind and tyrants rule
the state.

On every side we see the fruits of industry and toil,
The busy workers never cease—the sound of their
turmoil

Comes like the summer hum of bees from out their
honey bowers,

But think ye not it is the sport of bees among the
flowers.

Ah no! those long, long beds, with plants so strange
to modern eye,

Are but the work of unpaid slaves who have to toil
and die;

Those wooden hoes and flinty spades so thickly
strewn around

Wielded by human hands alone must cultivate the
ground.

No animal assisted their toil, no blade of metal
strong,

No quick machine with iron soul urges the work
along.

But helpless at their slavish tasks the laborers come
and go,

While warlike guardian warriors watch, and, stalking
to and fro,

Their tyrant rulers richly clad in mantles bright and
fair,

With wives and children, filled with pride, enjoy the
balmy air;

Their liveried servants march in front, their banners
flaunt the sky,

Their ornaments of bone and shell and copper please
the eye.

These are the owners of this town, the men as we
shall see,

Who make the place and are the race that fill its
history.

And how they chatter, how they talk, they fill the air
with glee,

The sage propounds his wisest thought, the lover
makes his plea,

The gossip flings her scandal round, the mother soft
and mild,

With winning smile bends willing ear to hear her
prattling child.

The politician pulls his wires, the merchant talks
his wares,

The saucy belle goes flitting by with all the modern
airs,

While romping girls and tricky boys are ever on the
go,

In this old Ohio city some thousand years ago.

But who are those who now return, their daily toil
complete,

With blistered hands and aching hearts and sore and
weary feet,

Their stolid faces show no joy in all these dragging
years;

Their scanty food, the very worst, is moistened by
their tears,

Their life's a burden; all their days pass in a long-
drawn pain,

Wasted by winter's bitter snows and summer's ruth-
less rain:

The sun god on their masters smiles, the priests
repeat his praise,

They stretch their hands in vain appeal, but dumb
are all his rays.

They send their hungry cry for bread up to his burn-
ing throne,

And in return, O pitiless heaven! receive a senseless
stone.

In the dark forests of the north, where boundless
waters flow,

Where game and fur and fish abound amid the realms
of snow,

Where maize in all its plummy pride can bring no
ripened ear,

To lift the patient laborer across the frozen year,
Huntsmen and fishers dwell alone in all that vast
expanse,

Who wield the stone ax, draw the bow, and shake the
murderous lance,

Fleet as the deer that roam their woods, wild as the
fierce cougar,

Bloodthirsty as the ravening wolf, they live alone by
war.

And yearly as the maze gets ripe, when Indian sum-
mers come,

Those fierce wild nations of the north pour from their
savage home;

Destruction stalks before their hosts, death glances
from their eye;

The poor industrious mound-builders before them
shrink or die.

In vain the cunning engineers with labored toil and
slow,

Erect those wondrous earthen works on many a
broad plateau;

In vain with numbers flushed with pride, covered
with targe and shield,

The warriors of the mound-builders are mustered in
the field;

The savages like panthers come, or lightning's flash
at night,

And death their presence shows alone, while darkness
hides their flight.

The captives whom they bear away across the billowy
floods

Become enamored of a life in freedom's snowy
woods;

No labors tire their weary limbs, the captor's home
they share,

And though 'tis oftentimes poor and scant, they eat the
captors' fare;

Equality at last they find which they had never
found,

Oppressed by ruling class and caste as tillers of the
ground.

They join the red men of the wood; they swell his
battle cry.

A nation thus demoralized is ready soon to die,

And national extinguishment, when ripe, is never
slow,

And thus it found the Mound Builders some thousand years ago.

The faithful few who still remain and trim the sacred fires

Of ancient holy altar hearths above their moldering sires

See one by one those fires go out on many a sacred mound,

Its people dead, its bastioned walls low leveled to the ground;

They gather to their strongest hold, they raise their battle cry,

The patriots of a failing race have naught to do but die.

What matter if their valiant hearts shed blood like summer rain?

They strike for home, for wife and child, but ah! they strike in vain.

In countless hordes the invaders come, they climb the slippery walls,

And soon beneath their countless shafts the last defender falls;

Beside the smoldering altar fire the priest is laid in death;

Upon his blood-ensanguined throne the monarch yields his breath;

The princess sleeps a dreamless sleep within her lonely bower;

The gallant soldier's ghostly form still keeps his guarded tower;

The busy streets are peopled now by silent, lifeless forms,

The prey of summer's scorching heats and winter's freezing storms;

Kind nature weaves a robe of leaves around each whitening bone,

And soon each mound and wall of ground stands silent and alone;

The huts have vanished from the plain, the boats have left the river,

The nations of the Mound Builders are gone, and gone forever!

III.

'Neath the arches of the forests,
Where the boughs hang dark and dreary,
Where the world is dim with shadows,
And the golden summer sunshine
Only glances through the meshes
Of the overhanging forests,
Dwells the silent, sullen red man.

All the world to him is somber,
Earth a land of mists and darkness,
Every hand is turned against him,
Every voice is war and vengeance,
Every tribe destroys its neighbor,
Every village fights its fellow;
Man is but the tool of vengeance,
Which he owes supreme allegiance.

Ever hunting, ever hunted,
Still pursued and still pursuing,
Like the savage beasts around him,
Like the birds of prey above him,
Like the fish within the waters,

Like the all predaceous creatures
Who deplete each other's millions,
Keeping nature's balance tally
In the records grim of ages.
So the red man lived and perished
In the continent he conquered.

What his history? Idle stories,
Vanishing and evanescent;
Merest films of dimmest vapor
From the warpipe of tradition.
Clouds that never ope for sunshine,
Books unprinted, scrolls unlettered,
Hieroglyphs without a meaning,
Pictured stories untranslated,
Rhymes unsung and runes unsculptured,
Are the history of the untamed Red man.

What his works? The untamed forest,
Swathing all the face of nature.
Jungled hills and swampy valleys,
Neither field, nor fane, nor temple,
Not a road, a state, a city,
Not a trace of cultivation
Either physical or mental,
Not a mark that dares to linger,
Touched by time's destroying finger,
Shows the labor of the Red man.

What his thoughts? This child of nature
Has a somewhat fair conception
Of his various rights and duties;
Loves his tribe, his chief, his wigwan,
Loves the spirit great that made him;
Looks beyond the clouds of sunset
To the grounds, where, pure and happy,
Dwell the shades of hunter chieftain—
Such the thought-lore of the Red man.

O'er the blue and misty ocean,
Came like birds adown from heaven
White winged ships of white faced people,
And the red man gazed and wondered—
Wondered at those strange creations
Moving swan-like on the waters,
Moving, handless, breathless, lifeless,
Yet so life-like, on the waters.
While he gazed the white man landed,
And that foot which kissed the seashore
Sealed the red man's doom forever!

IV.

Before the white man's craft and steel
The red man fades away;
And lo, the continent remains
The white man's land to-day
Despite of Tuscaluza's club,
Of Montezuma's spear,
Of Powhatan's beleaguering hordes,
Or Philip's reign of fear;
Despite of Pontiac's dusky hosts
Combined in fierce array,
Or bold Tecumseh's voice of fire,
Quenched in the fruitless fray,
Where he, last hero of his race,
Despairing passed away.

The white man builds his busy towns
Above the Red man's graves,
His car roars through the red man's woods,
His steamship curls the waves

Where erst the red man's light canoe
 Rocked lightly on the flood,
 And on whose shores the warriors held
 Their carnival of blood.
 The floods which checked the red man's course
 Obey the white man's will,
 The winds, the waves, the fires are slaves
 To turn the white man's mill.
 Ten thousand lines of telegraph
 Connect earth's distant lands
 And California calls to Maine
 Through telephonic strands.
 Our country is *perfection* now,
 Our business just the same,
 And great men (instance General Grant)
 Make *fortunes* through a name.
 Machinery does our roughest work,
 And sharpness does the rest ;
 With a few cast-iron consciences,
 We might be truly blest !

We tear the forests from our hills,
 The flowers from our plains;
 We rake the soil from off our land
 To magnify our gains.
 O'er prairie wide, on mountain high,
 By rivers long and broad,
 From sea to sea, o'er all the land,
 We wave the imperious rod.
 Our lives are but a feverish dream,
 A strife for fame and gold;
 And virtue, truth, benevolence—
 All things are bought and sold.
 The politician buys his place;
 The sacred desk not free,
 Is smirched by gold; the lawyer lends
 His conscience for a fee,
 The doctor—but I must beware
 How far my tether goes,
 'Tis better far to stop my pen
 Than tramp a brother's toes.

Are we the men our fathers were,
 And do we stand as high,
 Is there no failure in our strength,
 No cloud across our sky?
 Could we live as our fathers lived
 On diet coarse and spare,
 Exposed to summer's scorching heats
 And winter's gelid air ?
 No, sir ! Our stomachs all would fail,
 Our livers all play out;
 Hearts flutter, lungs like bellows heave,
 And joints creak with the gout.
 And why? Because our feverish life
 And want of sanitation
 Is sapping health and stealing wealth,
 And killing off our nation.
 The little child of tenderest years
 Is hurried off to school,
 To mope amid the poisoned air,
 And learn to be a fool,
 Crammed with a dozen 'ologies,
 On books and training fed.
 Neuralgia drives its ticklish nerves
 And mania claims its head ;
 Precocious men and women swarm
 On life's steam-driven stage,
 We have worn-out brains and senile souls
 At fifteen years of age !

Our food—if we can call it food,
 Is pleasing to the eye,
 And yet there's death or deadly dirt
 In half the things we buy.
 The staff of life is splinted up
 With alum by the pound.
 Our groceries, too, get sadly mixed
 In trade's unceasing round.
 The sharp wholesaler, alligates
 So he can make the prices
 And always rake the shekels in,
 Whether stock falls or rises.
 The jobber takes the business next,
 And mixes it and mixes;
 And last the good retailer comes
 And fixes it and fixes,
 Till when at last the customer
 Has bought the stuff and paid it,
 He scarce can tell you what it is
 Or how on earth they made it.
 With glucose in the sugar bowl
 And corn starch in the cream,
 The bulls of bashan wake us
 From our oleo-margarine dream.
 O man of family, for strength
 Trust not the milk-can now,
 'Tis two quarts from the country pump
 And one quart from the cow.

Our dwellings (not the poor men's homes
 But homes of men of wealth)
 Are built for show and vain parade,
 But how about our health ?
 Are health and strength inhabitants
 Of primly sealed up rooms,
 With fly-screens on all openings,
 An atmosphere of tombs ?
 No letting in of God's free air,
 The dust annoys us so ;
 We get our share of outer air,
 It rises from below:
 From sink and pipe and sewer trap
 Comes Shiva's poisonous breath
 That spreads the noisome pestilence
 And fills the air with death
 Ye eat the poisons in your food,
 Ye breathe them in your air,
 Ye paint them on your pallid cheeks,
 Ye rub them in your hair;
 Your garments swarm with poison germs,
 Your houses reek with woe,
 Throw not the blame upon the Lord,
 Yourselves have made it so.

How remedy this state of things ?
 There's room enough to spare,
 The race that owns a continent
 Can give its children air.
 Heat up your parlors piping hot,
 Throw open every door,
 Let babies play by open grates,
 Or roll upon the floor,
 For why should we economize
 So much in wood and coal,
 At such a wonderful expense
 Of muscle, brain, and soul ?
 How shall we regulate our lives,
 How keep ourselves in health ?
 Not by the emulation wild
 Of scrambles after wealth.

Better the converse, social, free,
Of men of equal fate,
Than all the assemblies, crams, and jams,
Of those, the so-called great,
Who set the fashions, lead the church,
And try to own the State.

Better a clean suburban home,
A rural cottage neat,
By bobolink haunted, flowery field,
Or maple shaded street,
Than marble palace, smudged with dirt
By trade's unhallowed feet.

Better a hearty family
Of noisy boys and girls,
Than one lone young philosopher,
One of the modern pearls,
Or one dear girl "too lovely too,"
All style, and nerves, and curls.

"Better a little with content,"
A mind to enjoy our ease,
Than millions gained by basest means,
And left on our decease
To raise a storm among our heirs,
And swell a lawyer's fees.

V.

The red man's wild and gibbering ghost
Sits where the rank weeds wave,
In noisome damp exuberance
Above the white man's grave.
His voice is whispered in the winds
Which stir the morning pines,
And thus we hear its mocking tones
Above our mouldering shrines:
Ye took the land from us away,
Ye made the soil your prize,
Ye built your towns upon our tombs,
And now your first-born dies.
We laugh to see your children pine,
We joy to hear you groan;
Ye gave the red man blood to drink,
And now *ye* *are up* your own.
O white man, if your failing race
Must vanish in the gloom,
The spirit of the red man bids
You welcome to the tomb!
The spirit of the mound builder
Still lingers by the stream,
Where ye pass years of anxious toil,
Your short life's fevered dream.
The waters murmur forth his voice
Sad as the night bird's cry,
The melancholy dirge of one
Who would, but cannot die.
O white man, listen to my tale:
Material wealth was mine,
With many a shining diadem
And many a costly shrine;
Behold those few dismantled mounds,
Embrace them in your view,
The only trace of my lost race—
The same may happen you.
Material wealth, material strength,
Material force combined,
Can never make and keep a state
Without concurrent mind.

The spirits of our mighty dead
Speak from the solemn past,
We hear them in the wind's low sigh
And in the roaring blast.
The souls who ruled the vanished past
Are ever hovering nigh;
Then listen now, with willing ear,
To their electric cry:
Roll from your minds the thrall of self,
Cut every bond away
That binds your souls and blinds your eyes
And leads your hearts astray.
From earth's deep center send your cords
Up to God's shining throne,
Electrify and energize
And make the world your own!

A Talk About Puerperal Fever.

BY T. CURTIS SMITH, M. D., AURORA, IND.

BY puerperal fever we signify what we believe is now better comprehended by the expression "puerperal septicæmia," in which we have a continued form of fever occurring in the parturient woman after or in connection with her accouchement. It results or seems to result from absorption of decomposed animal material of some kind, and is usually more liable to occur where abrasions or solutions of continuity occur in connection with the process of parturition. These lesions may be in the uterus, vagina, perineum. The long retention of a putrid fœtus, of clots of blood, or a portion of placenta may lead to the same febrile process.

We may also meet, and do meet with, puerperal peritonitis, entirely independent of any septic origin. This may and most often does result from traumatism occurring during labor, by long continued labor, by sudden exposure to rapid changes of temperature, or in fact any inciting influence that would induce an attack of peritonitis, in a non-puerperal individual.

Puerperal peritonitis, however, is a very frequent complication of puerperal septicæmia, and in a very large proportion of cases it will give such cases a very serious complexion, rendering the prognosis still more grave than before such involvement occurred.

We may therefore remember that we can have puerperal fever—septicæmia—with or without involving the peritoneum, and we may have puerperal peritonitis without any of the evidences of the absorption of decomposed animal material, septicæmia.

The etiology of puerperal fever is not yet as clearly defined as the foregoing language

may seem to imply. It is not always the consequent of the absorption of septic material. It often occurs endemically or epidemically. Sometimes a whole town, or city, or hospital will be the subject of its influence and the parturient will be in such periods in vastly more jeopardy from an attack of this greatly dreaded disease than at times when such influence is not present. This condition has been known to prevail to a very serious degree in a locality where many of the lying-in women became its subjects, the disease giving a very large mortuary proportion as the result of its attacks. Hospitals, in the past, more than in the present, have shown many very fatal endemics. The improved sanitation of our hospitals of the subsistent time have rendered such endemics less frequent than in former times. The disease is also considered communicable by infectious or contagious influence, and by a direct or indirect communication with erysipelas. It is also claimed that it may be produced by cadaveric material on the hands of the accoucheur, or by sponges, or by carelessness in the nurse as to septic matter on the hands or clothing. I have many times noted that communication with scarlatina, or with diphtheria has been accused of generating this disease. So also long continued mental distress has often been observed as an undoubted etiological factor. This is more especially remarked in cases of illegitimate pregnancies, as these yield a larger per cent of cases of puerperal fever, and a proportionately greater mortality than do legitimate cases.

As to the real existence of any influence exerted by scarlatina or diphtheria that enables it to incite puerperal fever, I have some hesitation in believing. In twenty-two years of practice, where occasionally cases of confinement have occurred in more or less direct intercourse with these diseases, I have not met with an instance where puerperal fever was ever produced by them. That such specific diseases may give rise to this form of fever I may not altogether doubt, but my experience does not accord with such belief.

My personal observations of the etiological relation of erysipelas to puerperal septicæmia does not accord with that of the mass of the medical profession. Everywhere and by all authorities we are stoutly warned against attending cases in confinement while we are in charge of cases of erysipelas, lest we convey the poison to a woman in labor or recently

confined that in her will develop puerperal fever. In a multitude of published cases and by the statements of honorable and widely experienced practitioners, it seems to be unhesitatingly accepted that communication between cases of erysipelas and women in confinement will incite puerperal fever in the latter. I do not say this is not so, but I do say it is not always so, nor nearly always so.

I will give a little of my own observation and experience in this matter. Less than ten winters since there was an epidemic of phlegmonous erysipelas in the vicinity where I was then practicing. I think that almost every physician then and there came into direct contact with some one or more of these cases. The severity of the epidemic may be known by the fact that in a number of persons it proved quickly fatal, one of the subjects being a hale, healthy young man. In some instances extensive sloughing was present, making the cases very serious. During this epidemic I did not meet with or hear of a single instance of puerperal fever in that locality or very near to it. I am not aware that any one of the physicians ceased to respond to obstetric calls during the continuance of their attendance upon cases of erysipelas, nor am I aware that any extra precautions were taken by any of them to prevent carrying the contagious or infectious influence with them wherever they went, beyond that of the simple scrupulous cleanliness common to physicians. I have been told by a very able and conscientious physician of his going directly from a case of erysipelas to an obstetric case with no other precaution than washing and changing his clothes. No harm resulted. I have known a very good physician, and, I believe, a conscientious man in matters professional, to attend a case of phlegmonous erysipelas and in my presence and at my advice to freely lance the boggy swelling to admit of the free discharge of the pus, and still go on with obstetric practice the same as though no such case was under his care. No puerperal fever followed in his wake. I have also known a physician who was attending two cases of puerperal fever to attend other cases of labor and not so much as change his clothes and yet not communicate the disease. The same physician at another time was attending a case of this disease that proved fatal, and while on his way home from his last visit to this case he was hurriedly ushered into a case of labor by the wayside in a rural cottage. No puerperal fever followed his attendance.

During this last summer I was called one afternoon in June to see Mrs. J—— who had been confined by a midwife four days previously. I found her with erysipelas of the left ear and side of the face. There was no abdominal tenderness, no unusual odor attending the discharge, and nothing remarkable or extraordinary in the case except the presence of erysipelas while in puerperal confinement. Under the treatment of quinine internally and sulphite soda solution externally, she so far recovered as to be dismissed in four days, with no symptoms of puerperal fever at any time.

A physician in good and reputable standing of nearly forty years practice, recently, at a local medical society meeting, related the instance where a wife nursed her husband who was afflicted with erysipelas of one foot. She was delivered at term in the same house, while her husband was still suffering from the erysipelas. No puerperal fever followed and she had a good getting up.

I believe instances like many of the foregoing could be greatly multiplied if the members of the profession at large would freely relate their personal observations and knowledge of them. Such revelation would in a large measure tend to lessen our fears of intercourse between erysipelatous patients and parturient women. That such a course would be wise or in the least desirable I very seriously doubt for I believe there is a very intimate relation between the two diseases, if indeed they are not one and the same disease affecting different tissues and acting under different conditions and circumstances. More on this point anon.

It is certainly fair to give some observations that show the opposite of the statements above written. These will clearly intimate the propriety of great care to prevent intercommunication between puerperal cases and those of an erysipelatous character. For instance, old and very honorable physicians with whom I am personally acquainted, have related in my hearing many instances where puerperal fever has been very certainly induced by intercourse with cases of erysipelas. Some of these instances have been shockingly fatal to the puerperal woman. The literature of the etiology of the disease under consideration is full of warnings and instances where it has been caused by communication with the same fever or with erysipelas, through physician, nurse or attendants.

In one instance recently I know a case of facial erysipelas was but momentarily ad-

mitted to a lying-in room where a woman recently confined was resting. A very severe and almost fatal attack of puerperal fever followed this accidental exposure.

In another instance of recent occurrence I saw a case of this fever in consultation where there had been a neighborly communication between a case of erysipelas and a woman recently confined. The latter contracted the fever and died of it. Other such instances could be given here if the literature of the disease was not already full of them. The multiplied exemplification of puerperal fever following exposure to those in communication with puerperal fever or with erysipelas are too vast in number to be gainsaid and stand boldly out to warn us against any carelessness in permitting such relations between such patients ever to be permitted when possible to prevent it. I would not, therefore, for an instant be understood as teaching that free communication may attain among such cases or those who treat or nurse them without fear of the one being conveyed to the other. On the contrary such incautious demeanor toward puerperal cases is not in any sense to be commended, but condemned.

The fact—if fact it is—of there being such an intimate relation between erysipelas and puerperal fever, has led me to the thought that they are identical in their causes and specific character. If erysipelas can give rise to puerperal fever, and the latter is an entirely different and distinctly separate disease from the former, then we must allow that, in this instance, at least, a disease of a distinctly specific character can produce, under favorable conditions and environments, another specific disease of an entirely different character and equally separate and distinct in its nature. This is certainly not the rule in other diseases. The virus of syphilis, scarlatina, rubeola, variola, typhoid and typhus, each produce a disease of its own kind respectively, and not some other form of morbid process. Is erysipelas an exception to this general rule? I am inclined to doubt it very much. For a long time I could not conceive how this disease, contrary to all rule, could give rise to a disease of another and entirely separate and distinct genus of disease. I am very much disposed to look upon erysipelas and puerperal fever—puerperal septicæmia—as one and the same disease operating on different tissues, under different conditions and environments. The first man I ever heard give expression, publicly, to this view, was Dr. Geo. Sutton, of this city, a man of age, expe-

rience, deep practical observation, and of national reputation. This expression was made by him at a recent meeting of our county medical society. Another member, Dr. R. C. Bond, also related, at the same meeting, an instance of puerperal fever, in which the symptoms were very grave. Unexpectedly, erysipelas of the face set in. As soon as this was established, the abdominal and general puerperal symptoms subsided, and the case promptly recovered. Another instance was related by one of the members, where a case of erysipelas seemed to produce, by communication, a case of puerperal fever, and that case of puerperal fever was suspected strongly of giving rise to superficial erysipelas of the face in a third party, and to a very grave case of the same disease in a fourth party, one death being the result.

Now, as to whether the two diseases—so called—are really two separate and distinct morbid processes this deponent saith not. Indeed, I do not know. But I would not be at all surprised, if within a very few years, it should be demonstrated conclusively that the disease germ that will give rise to erysipelas in one case, is the same in identity as the one that will give rise to puerperal fever in another case, and that therein lies the great danger of intercommunication between a patient affected with erysipelas in any form, and the puerperal woman at, or near, the time of accouchement. That one disease does not always follow exposure to the other, does not at all prove the contrary of the above proposition as to their identity, any more than the well known fact that an unprotected person may be exposed to variola and yet fail to contract the disease, proves the absence of the variolous poison; for, another person, unprotected, may, at the same time, and from the same variolous person, contract variola, the former being able to resist the action of the contagious poison, the other being susceptible to its action.

Passing over the morbid anatomy and symptoms of the disease, we will say a few words as to its treatment, and thus terminate this article, which, indeed, may prove to be more noted for its oddity and length than its truly practical character.

In these days, when sanitation and prophylaxis are so much in demand, the preventive division of treatment deservedly receives the first attention. One of the first and most essential things to do is to avoid every source of the disease. All communication with infectious diseases should be cut off, and no one

who is in communication with cases of puerperal fever or erysipelas, should come into even remote communication with the lying-in woman. All septic animal matter should be scrupulously kept away from proximity to the patient; the secundines should be thoroughly removed, the vagina, in cases where the discharge assumes an unwholesome odor, should be well washed out with syringe and water; better with carbolized water, or with a solution of Hydrarg. Bichlor., 1 to 1000. I believe, however, that this matter of the use of vaginal and intra-uterine injections is, with the parturient woman, being very largely overdone. To insist that every case must have the wash used every two to four hours, is to my mind, not only often impossible, but often worse than useless. When the bedding and napkins are well and frequently changed, and great care as to cleanliness is observed, and there is no odor of decomposition accompanying the discharge, the woman doing fairly well in other respects, in such a case frequent injections are needless, and I believe very often hurtful, especially when they must needs be administered by an awkward or inexperienced nurse. I furthermore believe that where a woman has sufficient general strength and is not the subject of a weak heart, or some other decided disability forbidding it, she ought, after the first 30 hours from the completion of labor, to be assisted over the vessel whenever necessary to evacuate the bladder or rectum. By so doing, the vagina will clear itself of any considerable clots of blood or loose sanious discharge by force of gravitation, or, if present, any portions of retained placenta that may be lying therein. This will often effect the elimination of the cause that leads to the demand for the syringe, by inducing the natural riddance of clots and blood that would be retained in the vagina in the continued horizontal position for hours, and until horrid decomposition would begin, and give rise to an abominable odor, and so to the liability to its absorption, producing blood poisoning, and, therefore, puerperal fever.

In cities of vast population it may be necessary to follow Dr. Thomas' directions as to preparing the room, washing the walls, floor, furniture, and all that. But in small towns and rural districts this is simply impossible now, and is certainly not necessary. In most cases the physician is called only when the labor becomes active, often having never seen or heard of the patient until the summons is rendered requiring his immediate at-

tendance to the case in actual labor. To follow Prof. Thomas in such instances is not possible. Often when engaged for attendance some days or weeks in advance, it is not feasible to the patient to carry out such a process of scouring and antiseptic cleaning. She does not see the good of it, and will not do it. It is not needed, as a rule, outside of large towns and cities, though it doubtless is better to carry it out fully in such vast centers of population. I certainly do not under-rate Thomas' teaching for his city and hospital. I do believe, however, that the syringe may, by improper or too frequent use, be made the instrument of death instead of a healthful means of preventing puerperal fever. Experience also proves this to be so.

In general treatment the profession at large are certainly fairly well posted. Without going into particulars and details, I would say that the treatment resolves itself into the liberal use of quinine, some form of opium, the disinfectant vaginal enema properly used, the local use of ice by means of the rubber ice bag or the cold rubber coil, and so much concentrated nutriment as the patient can take. Any and all of these need to be regularly and systematically used. A blister may often be a strong argument against the peritoneal inflammation if it exists. This can be applied underneath the ice bag or coil, so as to secure the benefit of both cold and counter-irritation. In most cases the demand for stimulants arises early in the course of the disease. These should be very liberally given. Some cases will use a pint or more of good whiskey or brandy every 24 hours with great advantage. The stomach *must*, if possible, be kept retentive. True, we can levy on the rectum and use hypodermic injections, but these are not equal to the natural receptacle for food, drink and remedies. In these days when concentrated beef can be had in every town, it will be found a real and invaluable boon in many cases. I have found "Johnson's Fluid Beef" a most magnificent article of diet in all low forms of disease where concentrated food of easy digestion was demanded. It can easily be made palatable, or it can, if necessary, readily be used per rectum, being quite equally beneficial by this method of administration, and in it one can use bisulphate of quinine, morphia, or similar remedies. Some other very similar fluid beef preparations are, perhaps, as good. It has seemed to me that I certainly have saved two puerperal fever cases by sustaining them with this fluid beef when the stomach

could not retain food or remedies enough to avail in sustaining strength, or to contend against the power of the disease. In other low forms of disease I have found it equally available and invaluable.

There are many points of difference in material and minor matters of treatment to which I will not here refer, as this paper has already grown too long. I will close by saying that in this, as in other grave diseases, the treatment must be varied to suit each individual case, and no one rule or prescription can be always followed for all cases. Many little collateral remedies or adjuvants to successful treatment will be demanded, and must be used accordingly.

Calomel in the Treatment of Diphtheria.*

BY DRS. G. P. ANDREWS AND W. R. CHIT-TICK.

THE following cases are reported without comment, as a contribution to the study of a difficult problem:

DR. ANDREWS' CASES.

Case 1.—Eddie W—, Alfred St., aged 7, had been ailing for three or four days. Was taken very ill Wednesday night, Oct. 3d. Mother was up all night with him, and applied all the domestic remedies at hand. She gave him alum and molasses, which vomited him and kept his throat clear enough to permit of his breathing. Dr. A. was called early the next morning, and diagnosed diphtheritic croup. Patient's breathing at this time was supra and infra-sternal. Face was livid, and the membrane extended up on to the pharynx, tonsils and uvula, and in the posterior nares. Dr. Morse Stewart, Sr., was called in council, and it was decided the child could not live. He was immediately put upon calomel treatment, 10 grs. being given for the first dose, followed by $7\frac{1}{2}$ grs. every hour. In the evening he was much relieved—breathing being much easier. A canopy was made over the bed with sheets and the child made to breathe air saturated with slacked lime. Oil of eucalyptus was poured in a kettle of hot water and kept on the stove, and thus the air of the room was saturated with it. Milk was given every two hours. During the afternoon he had a small passage, and also one in the evening, and during the night one or two more dark green ones. Next morning, Friday, he coughed up quite a piece of membrane. Breathing was very much easier, and

* Read before the Detroit Academy of Medicine.

he asked for his toys. The calomel was kept up, every two or three hours, until the middle of the afternoon. He took in all about 195 grs. He was then put upon an expectorant mixture and nourishment given regularly. On the fourth day he was pronounced out of danger. In this case the spray and vapor of lime did much to loosen the membrane. Slight paralysis of the muscles of deglutition followed.

Case 2.—Baby, D——, High St., E., aged 9 months, was taken ill five days after the brother died. Child was feverish, and when throat was examined membrane was seen on both tonsils. She was put upon 3 gr. powders every two hours, and for about 24 hours, and then alternately every $1\frac{1}{2}$ hours, with a mixture of chlorate potass., lactic acid, and tr. chlor. iron. Stools were scant and did not assume a dark green color until the second or third day. This child took about 60 grs. Patient made a good recovery, and was discharged, cured on the sixth day.

Case 3.—Libbie B——, St. Mary's Hospital, aged 18 years. Robust constitution. Did laundry work in a restaurant. Was taken ill Sept. 26th. Was seen by three different physicians who pronounced the case diphtheria. Was admitted same evening. Was put upon the ordinary treatment of tr. chlor. iron, chlor. potass. and quinine. Remained on this for five days. Membrane was very extensive, covering both tonsils, uvula and the posterior wall of pharynx, and was extending downwards into the trachea, and was more extensive at my first visit than it had been before. First saw her when I came on duty at hospital, Thursday, Nov. 1st. Waited until 9 P. M. that evening and commenced by giving a 20 gr. powder of calomel, and gave 15 grs. every two hours during the night. Next morning the membrane had about two-fifths disappeared. Continued the same during the day, and by evening about two-thirds of the membrane was gone. Continued the powders during the night. Next morning, Friday, Nov. 2d, all of the membranes had disappeared from sight except one small spot about one-eighth to one-sixth in. in size. Patient was able to swallow with much greater ease, slept better, and began to eat more. She had taken 275 grs., one dose being omitted during the first or second night. She had two free passages, only, during the administration of the remedy; complained of no disagreeable symptoms whatever. She vomited a few times, but whether it was due to the calomel or to

coughing I am not prepared to say. She made a splendid recovery, stayed in the hospital about seven or eight days afterward, and then went to work again at the restaurant. After-treatment consisted of a pill containing extract belladonna, cinchonidine and strychnine.

Case 4.—Johnnie K——, 77 Abbott street, aged 7 years. Complained Tuesday evening, Nov. 20th, of a pain in his throat and in his ear. He was subject to earache, and his mother applied her usual remedy on a little cotton. Thursday morning they sent for me. On examining the throat it was found to be covered with a thick, tenacious, chamois-skin looking membrane, which covered all of the posterior pharynx, uvula, *palatine arches* and tonsils, and probably the posterior nares. He was at once put upon $7\frac{1}{2}$ gr. doses of calomel every two hours, 10 grs. being given for the first dose. The child disliked medicine of any kind, and the mother was in the habit of humoring him, therefore he did not get the powder regularly. That same night the dose was changed to 5 grs. every hour. Next morning on visiting him it was discovered that he had taken only three or four powders, when he should have had thirteen or fourteen. It was impressed upon the mother that it was absolutely necessary for him to have them regularly, or he would not recover. She gave them more regularly after this, but they disagreed with his stomach, and they had to be stopped. At this time (Thursday) the membrane became quite loose, a piece about as large as a silver five cent piece coming off of one tonsil, and that on the other being nearly loose enough to separate. But as soon as the calomel was stopped it reformed and spread into the nares, and could easily be seen anteriorly. Calomel was again given, and again the formation of the membrane was checked. His stomach rebelled again, and again the calomel had to be stopped. Other remedies were then tried, and he kept along until the fourteenth day, when he died of septicemia. During his whole sickness he did not average a tablespoonful of nourishment in twelve hours. He had three stools the first day—they were small and light-colored, and two or three on the second, third and fourth days, respectively. Only once did he have a full, dark green-colored stool while taking the calomel. The medicine was given to him in peach juice, which he was fond of, and this may have had something to do with irritating his

stomach. It is best to give this remedy in *cold water*.

Case 5.—Willie K., Abbott street, aged 5 years. Was fully exposed during his brother's illness, but did not come down with the disease until the day after his brother died. He complained during the night of having a sore throat, and his mother at once sent for me. On examination I found membrane well marked and constitutional symptoms active. I put him upon calomel in 4 gr. doses every hour until 40 grains had been taken. Calomel was then exchanged for corrosive sublimate, a solution being given containing $\frac{1}{2}$ gr. in 3 ounces of water; dose, one teaspoonful every two hours. When this was finished he was given a solution containing 1 gr. in 4 ounces of water; a teaspoonful of this every two hours, and part of the time every four hours. He was kept on this treatment for six or seven days. The action of the bichloride of mercury is very good, but much slower than that of calomel, and while it is probably best to begin on calomel the bichloride may be substituted with very good results.

This patient had one stool only while taking the calomel; it was large but natural in color. During the administration of the bichloride it was several times necessary to give him castor oil. There was no irritation whatever from either drug. This boy's appetite never failed but one day. He made a splendid recovery.

Dr. W. R. Chittick reports the following cases:

Case I. M. P., a girl, aged 13 years, just recovering from an attack of typhoid fever. Treatment was not commenced until the third day of the disease in order to more thoroughly try the merits of the remedy. At this time the membrane had spread from the tonsils to the uvula and the pharynx. The first dose given was 20 grs. and 10 grs. every hour was ordered. This was continued until the patient, interruptedly, had taken in four days *an ounce* less 20 grs. During the first eighteen hours of treatment she had seven stools; had a slight headache, but on the whole felt a little better.

Second day: The membrane spread, headache continuous, no appetite, and no more stools. 9 P. M.: Patient felt much better; attempted a stool twice, but passed nothing but wind each time. The medicine was now ordered every three hours.

Third day: No farther improvement; no

stools; exudation not spreading; ordered same dose every two hours.

Fourth day: Patient very much better; found her up and dressed; she had eaten a good breakfast; exudation diminished about one half; had separated from tonsils, leaving a bare red surface with small bleeding spots still on back of pharynx; ordered medicine every three hours.

6 P. M.: Had two good stools; appetite good; was still up, and felt pretty well; medicine discontinued at 10 P. M.

Fifth day: After the patient cleared her throat, I could see no membrane; had two stools, and they looked very much like chopped pickles.

Had two stools each on the sixth and the seventh days; appetite very good. There were no signs of salivation during the treatment nor afterwards. The only other treatment used was a little chlorate of potass., which I gave from the third day.

Cases II., III., and IV. occurred in a family where six in all were sick with the disease. The first was a child less than two years of age, and I gave it a small dose from my pocket case. It did not respond to this treatment, I thought, so I gave it up, and went back to the regular treatment as laid down in the text-books. The disease extended into the larynx and the child finally died. Failing in this case, it was with great timidity that I gave the remedy to the next two children who were taken sick. My timidity interfered seriously with the result for I gave small doses only after the second day. I abandoned the calomel and went back to the usual treatment. One recovered and the other died from exhaustion on the nineteenth day, having refused for some days to take medicine, food or drink.

Had I pushed the calomel in these cases I might have had very good results, and possibly saved the life of the fourth.

Cases V. and VI. occurred in one family. One, a girl about six years of age, had a light attack, and was soon over it. The other, four years of age, was a desperate case, the nostrils and throat being so stuffed up that it could hardly breathe, and the neck so swollen as to lose its characteristic appearance. I gave each child 5 gr. doses every hour. The lighter case was much physicked, the throat looked promising, and the remedy was discontinued the next morning. In the other case no impression whatever was made, although the calomel, in the same dose (5 grs. every hour), was kept up until it died,

which was about twenty-four hours after I first saw her.

Calomel has, I think a specific action in diphtheria for in these children while one, with a slight attack of the disease, was not able to stand much of it, the other, which was a very severe case indeed, was not affected in the least by it. In such a case as the latter I would now give 10 grs. every hour, or 5 grs. every half hour with some hope of bringing it through.

Cases vii. and viii. also occurred in one family. I was called to see a boy, aged 10 years, who had an attack of nasal diphtheria and thinking I could treat it best with the iron, potass, glycerine and lime-water mixture, with quinine and milk, I did not give him calomel. This little patient had passed the crisis, when the next day, in attempting to use a chamber in the bed, and being very much excited he suddenly died from paralysis of the heart. During this time, about eight days, the two remaining children escaped the disease by remaining outdoors as much as possible. But it happened to rain and they were obliged to stay indoors. The next day Clara, aged 5 years, was taken sick. I determined now to use calomel, and so ordered for her 5 gr. doses every hour until her bowels should move freely. She commenced at nine o'clock that night and had taken but nine doses when the desired result was obtained, and so the medicine was discontinued. When I arrived the next morning I found her sitting up in bed playing with her doll, and feeling in good spirits, having had for breakfast a slice of toast and some tea. I removed a piece of membrane apparently shrivelled, about as large as a silver three cent piece, from one tonsil, but from the other tonsil I was not able to remove it without force, which I did not care to do. It came off of itself within two days.

I think this was a remarkable case, showing the prompt action of calomel when given in sufficient amount.

The second case in this family was a delicate little girl twenty-two months old. She had burned her lips and tongue with lye. Membrane soon formed on these bare spots. As soon as it did so I ordered calomel in 3 gr. doses, which was continued until the child had taken 186 grs. of the drug; only two or three unsatisfactory passages from the bowels, however, were obtained, and I then discontinued the calomel for two days. The mouth became worse, the membrane extended to the throat, and the child was rapidly growing

worse. I ordered calomel, 8 or 9 grs. every 1½ hours. After eight powders had been taken the bowels operated pretty freely. But, although the formation of the membrane seemed to be checked, the patient was too far gone. I believe that if the calomel had been pushed at first until its effects were secured, the child might have recovered.

Case IX.—Michael Donovan, aged 8 years. This was a mild case. I thought at first he would not need much if any treatment, but gave him calomel to see what effect it would have. I gave only 2 grs. His bowels operated pretty freely during the night—six or seven times—so I stopped it next morning and gave a solution of corrosive sublimate, 1 gr. to 4 ounces of water, to be taken every two hours during the daytime and every three hours during the night. By the next morning the membrane had spread to the left palatal arch. I continued the solution every hour in the daytime and every two hours at night. Thursday morning, fourth day, there was no change in the membrane only that it looked a little loose. I tried the calomel again. It loosened the membrane, so that it could be partially removed. I gave the solution of the bichloride again for a day or two. It did not have much effect on his bowels. He had a good appetite during all his sickness, and made a good but slow recovery for a mild case.

Treatment of Asiatic Cholera.

BY WM. H. LATHROP, M. D., OF LOWELL, MASS.

IN VIEW of the possible advent of Asiatic cholera to this country, I beg leave to direct attention to some of the conclusions derived from the epidemic of 1873.

That epidemic, though it spared Michigan, visited *eighteen* states. Its history has been fully written in a report published by authority of the 43d congress, in 1875.

7356 cases of the disease were collected, and in all of these taken together, there was a mortality of 52 per cent.

As regards treatment, the mortality was as follows: With the use of calomel alone, 23 per cent.; with calomel and opium, 31 per cent.; calomel, opium and acetate of lead, 40 per cent.; calomel, opium and stimulants, 50 per cent.; when stimulants alone were employed, 59 per cent.; using the preparations of iron, 33 per cent.; while under the acid treatment, only 8 per cent died.

The larger number of cases were treated

very much as if the disease were cholera morbus, the pathology (for very good reasons, surely) not being well understood. Only 64 received the acid treatment, of which 5 died.

In the congressional report above mentioned, there is an account of a series of experiments made upon the bacteria of cholera, by Nedswetsky, of Russia, in 1872.

According to this investigator, the bacteria were not affected by quinine, camphor, carbolic acid, tar, calomel, and chloral; a small portion were killed by opium and nux vomica; nearly all of them by chloroform and muriatic acid; while they were all completely destroyed by chlorine water, sulphate of iron, tannic acid, nitric acid, and sulphuric acid. The last two were in the strength of one part in twenty-four.

The recent experiments of Dr. Koch and his colleagues, have shown that the cholera bacilli cannot live in acids, even the gastric juice sometimes destroying them.

Experience shows that it is best to allow the cholera patient to drink very freely of water, which he greatly desires. Dr. Johnson's castor oil treatment, as published by him in 1855, was due to his recognizing that the intestines contained a "morbific poison," which must be expelled; and that cholera was not a disease of the blood, as was then generally supposed.

Cholera is never generated *de novo* in this country, but always imported. Hence, the disinfectants used should be such as will kill the peculiar bacteria of this disease, they alone being capable of producing it.

These facts are presented merely as a reminder of what is well known to the medical profession, but it seems to me that they cannot be too widely published, or too strongly urged.

For the use of the public who are vitally concerned in the prompt application of remedies for this disease, I suggest the following:

For Asiatic cholera, drink freely of water, acidulated with sulphuric acid. As a disinfectant, use sulphate of iron.

The *Medical Press and Circular* says that of the four hundred and ninety-eight members attending the late meeting of the British Medical Association, at Belfast, Dublin sent twenty-one members, and all Ireland eleven members. Ireland was not enthusiastic.

Proceedings of Societies.

Detroit Academy of Medicine.

April 8, 1884.

The Academy met at the office of Dr. Noyes, Dr. Bradley presiding.

WRITTEN COMMUNICATIONS.

Dr. Lyons read a paper on "Some Recent Improvements in Urine Analysis, and Especially on the Bedside Tests of Dr. Oliver." Dr. Squibb's apparatus for estimating quantitatively the amount of urea in the urine was exhibited, with a practical illustration of the method of making the estimation. Dr. Oliver's test papers, as now manufactured by Parke, Davis & Co., were also exhibited, and the action of the recently introduced tests for sugar and albumin was illustrated, occupying the time till the hour for adjournment arrived.

April 15, 1884.

The academy met at the office of Dr. Cleland, Dr. Bradley presiding.

DISCUSSION.

Discussion being in order on the paper read at the last meeting, Dr. Long said: There is no doubt that a ready and certain test for sugar which could be used at the bedside, would be a great desideratum. The test papers certainly are as convenient as any thing can be.

Dr. Connor: I have always found heat a sufficiently delicate and reliable test for albumen. The specimen must be made acid if necessary. I have been interested in a recent discussion on this subject in which the most prominent physicians in Great Britain took part. Dr. Roberts, of Manchester, considers heat the most valuable test we have for the transudated albumen, the presence of which in the urine constitutes albuminuria. He uses a slender test-tube, applying heat to the upper portion only of the specimen, so as to make more evident any clouding of the urine. He says he can detect one part in 200,000 of albumen by this test.

I have never found any difficulty in detecting sugar in the urine, in diabetes, by the copper test.

Dr. Lyons: The experiments of Dr. Tyson and Dr. Purdy, in this country, confirm those of Dr. Oliver, of London, who states that heat and nitric acid are capable of detecting one part of albumen in about 10,000

of fluid, while tungstate of sodium and potassio-mercuric iodide give distinct indications in a fluid containing one part of albumen in 20,000; picric acid they find almost equally sensitive, while the ferrocyanide of potassium is similar in its range of use to nitric acid. Of these newer tests for albumen it may be said that the last mentioned is a convenient substitute for nitric acid, having the advantage over it of being perfectly non-corrosive. It does not precipitate peptones or vegetable alkaloids—at least any alkaloid likely to be found in the urine. (It does precipitate certain alkaloids, notably strychnine). The objection has been made against the mercuric reagent and picric acid, that these precipitate peptones and alkaloids. It is true that such precipitates are formed, but they are easily distinguished from albumen precipitates by the circumstance that they dissolve when heat is applied, returning when the urine cools. Alcohol also dissolves the alkaloid precipitates. The tungstate of sodium precipitates peptones but not alkaloids, except in alkaline solutions.

In applying any of these tests, citric acid should be first added to the urine, and the effect noted before the reagent is added. A precipitate produced by citric acid may be due to separation of uric acid, or rather of acid urates, or to the presence of mucus (mucin), or more rarely of certain oleoresins, as in the urine voided by patients after taking balsam copaiba. The cloud of urates disappears at once on warming the specimen. If due to oleoresins the cloud does not disappear as readily, but clears up at first, when the temperature is raised to the boiling point, but to return again before the specimen grows cold. The cloud, if due to mucus, is not dissipated at all by heat. Only after the effect of the acid by itself has been observed should the albumen precipitant be added, and then the test should never be considered complete until heat has been applied. The new tests do not supplant the heat test, but supplement it, and give us information which the latter cannot furnish.

In regard to the tests for sugar, I can only say that the picric acid test of Dr. Johnson, and the indigo test recently so strongly recommended by Dr. Oliver, are both of them valuable for purposes of diagnosis. Dr. Oliver has shown that the indigo test, especially, is liable to fewer fallacies than either the copper or the picric acid test. Copper is reduced by uric acid, and by many substances that are occasionally present in the urine, and

its indications are disturbed by kreatinine, by ammonia, and by inosite. Picric acid reacts with kreatinine, but not with uric acid. On the whole it disappoints one perhaps less often than the copper test, which, in the forms in which its indications are the most conclusive, is liable to spontaneous change, as in Fehling's solution. I am certain myself that one who has made use at all of the indigo test will prefer it to all others. The reagent can be kept indefinitely in the form of a test paper, always ready for use. It is not affected by either uric acid or kreatinine; in fact, inosite is the only constituent of the urine which is definitely known to have an effect on it. Although normal urine always gives an indication with the reagent, it requires five or six drops, or more, whereas if there is an appreciable quantity of sugar present, a single drop will show a distinct reaction, and in strongly saccharine urines a single drop of the specimen, after it has been largely diluted with water, will still reduce the indigo.

WRITTEN COMMUNICATIONS.

Dr. Gilbert read a paper on the physiological and therapeutical effects of mercury, with especial reference to the use of this agent in diphtheria.

DISCUSSION.

Dr. Maire: The committee which reported on the use of calomel in diphtheria offered no explanation of the reason why mercury in that disease does not manifest its usual effects. We should rather expect that the remedy would have more than its usual effect. We usually think of mercury as eliminated from the system through the liver and the glandular apparatus of the intestines. Physiologists, however, tell us that the kidneys are chiefly instrumental in removing it from the system. May not the action of the remedy in diphtheria be upon the kidneys especially? In one of my cases, already reported, there was severe salivation. Perhaps in this case, exceptionally, the kidneys were not stimulated to increased activity.

Dr. Carstens: I subscribe to what Dr. Gillett has expressed in his paper. I do not think calomel is a good cathartic, and I prescribe it very seldom. Blue mass I never use. Of course in syphilis I use mercury, and in some cases of dropsy, and sometimes in follicular pharyngitis I find mercurials very useful. I have recently used in diphtheria a solution of corrosive sublimate 1:4000 (Hydrarg. bichloridi, gr. i, glycerine $\frac{3}{4}$ i, aq.

font. $\frac{3}{4}$ vii); teaspoonful every two hours; also employ as gargle. I have had some cases that were quite bad, that I have got well under this treatment. In diphtheria it appears that mercurials act by promoting the secretion of mucus under the membrane, which is thus loosened and thrown off. Of course I use alcoholic stimulants also, and quinine. Mercury does not always diminish the amount of fibrin in the blood. When given in small doses, it has been shown that for a time it actually increases the number of red blood corpuscles.

Dr. Connor: There are two ways of studying the action of a medicine. We may trace its course through the organism, showing with what tissues it comes in contact, and reasoning from such imperfect analogies as we may possess, what may be its probable effect on each; but we cannot in truth trace any drug through its whole course as it passes through the body. On the other hand, we may study clinically the effects of a remedy in modifying the course of a disease, and this is what we, as physicians, are doing constantly, and it is the most important part of our work. How does quinine cure ague? We frame hypotheses of more or less value; the fact is certain, and we should be fools were we to wait for a full explanation of the *modus operandi* before giving our patients the benefit of that certainty. It was evidence of this character that our committee presented in their report. They gave us clinical facts. Accepting these, it is for us to study into the explanations. It is irrational to oppose the facts by preconceived opinions based on hypotheses which may be false. Certain effects are produced. What is the connection of these effects with their seeming cause? Our data for the study of problems like these are as yet very limited. I confess that when I began to study medicine I shared the prejudice that is so common in the profession, and that has been expressed here to-night against mercury; but as I have been brought face to face with therapeutical problems, I found that the remedy had powers possessed by nothing else in the *materia medica*, and I have learned by experience to put confidence in it. I remember a case that I saw under the care of Dr. Knapp, of suppuration of the cornea. The treatment resulted in salivation, but the object sought was accomplished—the inflammation was cut short. I have seen since that, over and over, how mercury has power to check suppurative inflammations. I have observed that the most popular remedy

for certain common inflammatory affections of the eye is an ointment of the yellow oxide of mercury. It effects a rapid cure. I incline to think that the action of mercury is similar in diphtheria, where there is a local inflammatory action. We know by experience that the syphilitic cachexia disappears under the action of mercury. There may be an analogous effect produced by the remedy in diphtheria. The effects of mercury on the system in health do not enable us to predict what will be its effect when the system is thrown into disorder by some morbid agency. A weak solution of corrosive sublimate applied to the healthy eye will produce nothing beyond a slight transient irritation. If introduced into an eye inflamed by the application of an infusion of jequirity, inflammatory action is arrested, not by the action of the mercurial on the eye, but because the activity of the poison, be it bacterial or otherwise, is destroyed. In a way analogous to this I conceive that mercury may act in diphtheria. There is certainly no remedy that has so often done me good service in a tight place as mercury, and I have never seen any ill effects from any dose of mercury I ever gave. There is one other thing that mercury will do. The action of the so-called cholagogue remedies was carefully investigated by a committee appointed for that purpose in England a few years ago. We know that mercury changes the character of the stools. How does it act? The investigations showed that calomel and blue mass cause increased peristaltic action in the upper part of the intestine, thus hurrying the bile on into the lower bowel, and preventing its re-absorption. No other remedy acts with equal certainty in this way.

Dr. Long: Still further, calomel causes an emptying of the gall bladder itself, the peristaltic action extending up the bile duct to the gall bladder. There is no increased secretion of bile, the function of the liver not being affected by mercury.

In the show window of a drug store in Lexington, Ky., there is exhibited a dose of calomel, one ounce, prescribed once by Dr. Cook, of that place.

Dr. Cleland: The committee was appointed to collect twelve cases of diphtheria treated by mercury. They have presented the clinical facts. It was no part of their duty to embarrass the consideration of these facts by making them appear in the light of any hypothesis. It is for the academy to draw its own conclusions from this essentially clinical report. Adjourned.

April 22, 1884.

The academy met at the Marine Hospital, Dr. Bradley occupying the chair.

Dr. Long brought before the academy a number of patients from the wards of the hospital.

Case I. A young man who six months ago received a gun-shot wound, by which the first, second and third fingers of the left hand had been lost. These fingers, including the metacarpal bones were completely carried away by the accidental discharge of a shot-gun. The little finger and thumb had, however, been preserved, and the wound was now nearly healed.

Case II. Showed the result of an old iridectomy. The patient had specific trouble, and had been treated in the hospital in Cleveland. The right eye had been lost, and an iritis in the left had been treated by an iridectomy.

Case III. The patient had formerly had a pleurisy with effusion which resulted in adhesions that now wholly prevent the entrance of air into the left lung. There was complete immobility of the left side of the thorax, and perfect dulness over the entire area.

Case IV was very similar to the preceding in the physical signs presented, but the history—the aspect of the patient, and the prognosis in the case, were strikingly different. The patient had pneumonia 18 months ago, and has not been well since. Was six months in the naval hospital. The inflammation has been followed by degenerative changes, and recuperative force appears to be wanting.

Case V. The patient, a lad of about 20, has an extensive carcinomatous tumor just above the right hip. The tumor was first observed last August, and is likely to terminate fatally within a year from the time of its appearance. The diagnosis was plain from the first, of a malignant growth. The only question was whether it was an osteo-sarcoma or an encephaloid cancer. It is evident now that it is the latter. The age of the patient would have led us to expect this. Soft cancer occurs most frequently in young persons.

There is a feeling of fluctuation in the anterior portion of the tumor in the iliac region that would tempt one to put a knife into it, but the result of such an operation would no doubt be the blossoming out of the

cauliflower excrescence so characteristic of the latter stages of encephaloid.

Dr. Gilbert asked if cancer was apt to occur in persons having a hereditary tubercular taint.

Dr. Long: I have seen instances of this kind; also others where tuberculosis has appeared in persons having a hereditary taint of cancer. I have aspirated this cancer repeatedly but have not succeeded in obtaining fluid. I found in the matter withdrawn by the aspirator a number of the characteristic round cells with several nuclei.

DISCUSSION.

Discussion was now in order on the paper read at the preceding meeting by Dr. Gilbert, on "The Action of Mercury."

Dr. Cleland, chairman of the committee which recently reported on the use of mercury in diphtheria, was called on to open the discussion. The subject, he said, was so thoroughly gone over at the last meeting that there remains little for the committee to add. Some strictures have been made upon the work of the committee which seem hardly called for. The committee was not asked to give a complete account of the action of mercury in diphtheria; they were appointed to collect and report clinical facts as a basis on which to found rational theories; and this they have endeavored to do.

Two important points seem to be established by the facts thus far gathered. 1st. Mercury given to a patient affected with diphtheria does not produce its usual effects; often forty grains of calomel were given to a young child without producing any considerable purgation. 2d. The rapid disappearance of the membranous deposit under the influence of the mercurial. The committee does not maintain that mercury is a specific in diphtheria, but it does appear that the effects produced by the remedy are so remarkable that they are worthy of most careful study, and lead us, indeed, to expect that mercury may in future be regarded as our sheet anchor in this disease.

Dr. Chittick: I do not know that I can add anything to what has already been said on this subject. In regard to the physiological action of the remedy, Dr. Connor covered the ground pretty well at the last meeting. It does seem to me that the mercurial exerts some truly specific influence.

Dr. Gilbert: One thought has occurred to me. It seems to me that we should not look to the physiological effects of a drug, espec-

ially in a case like this, for an explanation of its remedial action. If we understood the pathology, the nature of the poison, if there be a poison, we might arrive at a conclusion. Dr. Headland's theory is that there is a poison in the blood which mercury destroys. Mercury never directly improves the quality of the blood. Its action in increasing the number of red blood corpuscles must be indirect.

Dr. Noyes: I did not hear the paper last week. I did hear the report of the committee, however. I did not complain that they did not explain the physiological action of mercurials in diphtheria. What I did criticize was the exchange of calomel for corrosive sublimate in some of the cases, with no reason assigned for the change. I was much surprised at the tolerance of children for such doses of calomel. The committee seemed to lay much stress on the frequent repetition of the doses. Such quantities of calomel of course can not be absorbed into the blood.

When I commenced the practice of medicine there was a great prejudice against calomel. Hydropathy was popular in those days, and the Thomsonian practice. It was believed that mercury lodged in the bones and was not eliminated. The hydropaths used to sweat it out, and declared that you could see it floating in the water in which the patients had bathed. But every one who has used mercury knows that it produces powerful constitutional effects. It was formerly the practice to give it in frequent repeated doses until salivation was produced, and terrible consequences sometimes followed this abuse of the remedy—loss of teeth, sloughing of cheeks and salivary glands—even death. I have often given calomel in large single doses—fifteen grains, or ten grains of calomel with fifteen of sodium bicarbonate—as a cathartic, and no other remedy produces precisely the same effects—but I do not attempt to explain the facts.

Dr. Yemens: I have had a single case of diphtheria this week which I treated successfully with corrosive sublimate.

Dr. Lyons: Our committee has presented us clinical facts, which are of great interest and still greater practical importance. It was facts, not theories, which we asked them to gather. It is for us to study the facts, and seek to find the key to their interpretation. It seems to me that we need not despair of understanding them. One of

the facts, which seems to have excited the most wonder in the minds of members of the academy, is that in diphtheria large doses of calomel fail to produce their usual effects. How is it that calomel, in any case, acts as a purgative? Is it first rendered soluble and absorbed into the blood? If so what is the solvent? Calomel is one of the most insoluble of mineral substances. It has been believed that it must be converted into corrosive sublimate before it could be absorbed, and Mialhe showed that the chlorides of sodium and ammonium do actually produce this change. Very minute quantities of calomel, however, can be changed in this way by the small quantities of chlorides ordinarily present in the stomach. I remember that Headland speaks of some experiments made by himself or by Dr. Bence Jones, in which it was shown that bile exerted a much more powerful solvent action on calomel than any other substance present in the alimentary canal. This fact, taken in connection with that mentioned by Dr. Connor—that calomel hurries the bile downwards in the intestines—offers an explanation of the circumstance that calomel does not always purge; it may not meet with its appropriate solvent—either bile may be deficient in quantity or may be altered in quality. Nor is it necessary to assume that the bile acts as a solvent for the calomel. It may itself produce the effects we attribute to the calomel, that remedy only carrying it forward into the intestines, and this is in the line of Dr. Ritter's theory, viz., that diphtheria is essentially a disease of the liver. That was why he used calomel as a remedy. But Dr. Ritter was not the first one to recommend mercurials in this disease, although he must have the credit of having directed the attention of American physicians to it—and it would appear that with him it was an original discovery.

I found the other day in Hager's Praxis—a German work corresponding with our own Dispensatory—an account of the use in diphtheria of mercury, very much in the manner advocated by our committee. Calomel was given internally—two grains every two hours—the amido sub-chloride of mercury was employed by inhalation or in spray—while the oleate of mercury was applied by inunction. The treatment was described as remarkably successful, and Dr. Hager only makes this comment, "Such a mode of treatment may set us thinking."

One other point: Recently much has been

said about the value of oil of eucalyptus globulus, as a remedy in diphtheria. Now it has been shown that next to corrosive sublimate itself there is no substance known which is so destructive to bacterial life as oil of eucalyptus. The remedies have this peculiarity in common. Does not this throw some light on their probable *modus operandi*? All who have used the calomel treatment insist on frequent repetition of the doses. It seems to me probable that the calomel produces its effects locally—that it is by contact with the membrane itself—possibly by the gradual formation of corrosive sublimate in contact with the membrane that its beneficial effect is exerted. If this be true, corrosive sublimate, if substituted for the calomel, ought to be given in still more frequently repeated doses, so as to keep up a constant local action on the membrane. A few drops introduced into the mouth every few minutes, with free use of the atomizer, would seem to be the right way to employ the remedy.

I have thrown out these crude ideas as a suggestion of the manner in which, it seems to me, we may seek to interpret the clinical facts, so as to make them most profitable to us. The observations are of value in proportion as we can penetrate their hidden meaning. Of course we must never substitute mere theory for the facts of clinical experience, but theories which illuminate and give new meaning to clinical facts, far transcend in value observations on which only routine practice can be based.

Adjourned.

APRIL 29th, 1884.

The Academy met at the office of Dr. Andrews, Dr. Bradley presiding.

WRITTEN COMMUNICATIONS.

Dr. Wyman read a paper by Dr. A. R. Smart, of Hudson, giving an account of a case of pelvic abscess.

DISCUSSION.

Dr. Gilbert: Pelvic abscesses were little heard of in my student days. My first case occurred early in my practice in a patient who had been recently confined. Without knowing much of the history of these cases, I treated the patient on general principles, paying strict attention especially to cleanliness, and the case did well. A second case resulted from the application of nitrate of silver to the os uteri, but the difficulty was of comparatively a trifling character, and led to

no serious results. I have recently had a third case following parturition. The abscess pointed externally, and accordingly I opened it externally. I treated it like any other abscess. The cavity was emptied daily by aid of a small syringe, and carbolated oil was applied. This treatment was continued several weeks. I tried tincture iodine, but without benefit, and returned to the carbolated oil, 10 grains to the ounce, which is, by the way, a favorite application of mine in all surgical cases. The abscess ultimately healed. The question now arises whether the patient shall be allowed to become pregnant again. She is anxious to become again a mother, and in the present instance I do not see any reason why it should be avoided. It would be otherwise, of course, if the uterus had become bound down by adhesions. I think there is a disposition to make too much of these cases. Too much is done by the surgeon.

Dr. Wyman: Two points in the case related by Dr. Smart seem to me to be of especial interest. The first is that an abscess in which fluctuation had been distinctly perceived should have been opened and nothing found in it. It seems impossible that one possessed of the tactus eruditus could be mistaken in regard to the facts in the case. It is more likely that pus was actually present at the time the surgeon made his examination, but that the abscess had discharged into the bowel before the operation was made, several days later. The subsequent history shows that such spontaneous opening of the abscess did actually take place. The second point of interest was the discharge of blood, which took place from the wound at the time of the menses. The question arises whether this was caused merely by increased determination of blood to the pelvic region, or whether there was actually communication, perhaps through the fallopian tubes, with the cavity of the uterus.

Dr. Connor: The latest instance I have heard in which this tactus eruditus of the surgeon was displayed to signal advantage was that of a physician—a gynecologist—who lately called in a brother practitioner to operate on a carcinomatous tumor of the breast. The contents of the tumor proved to be nothing but pus.

Dr. Chittick: The woman whose case I reported to the academy some time since who had pneumonia complicating pregnancy, had previously had a pelvic abscess, and had been told by her physician that she could not become pregnant again with safety. She ex-

perienced, however, no difficulty whatever from this cause.

On motion of Dr. Connor the thanks of the academy were tendered to Dr. Smart for his interesting paper.

The name of Dr. Smart was proposed as a candidate for membership (as corresponding member) in the academy.

Referred to the committee on membership.

PREVAILING DISEASES.

Dr. Yemens: I have had recently two cases of cerebro-spinal meningitis. They were near together, on Franklin street. Have just seen a case which I think was at first one of scarlet fever, but the child has now purpura hæmorrhagica affecting the lower extremities.

Dr. Wyman: Although purpura is generally fatal, I have seen one case in which only the limbs were affected which recovered.

Dr. Maire: I saw once a case of scarlet fever in which there were purpuric spots.

Dr. Chittick: I have lately had a severe case of diphtheria, which was successfully treated with mercury.

Dr. Maire: A case of scarlet fever I had recently presented some features of interest. The rash was slight, and disappeared in a few days. In a short time glandular swellings appeared in the neck which proceeded to suppuration; the abscess was opened. The patient recovered.

In opening these small abscesses in the neck, when it is important to avoid the disfigurement of a scar, it is best to make the slightest puncture that is sufficient, to introduce a silk thread, and to evacuate the abscess by making gentle pressure on the adjacent parts.

Dr. Connor: Some years ago a young lady came to consult me for difficulty in vision. The fundus oculi showed the appearance peculiar to Bright's disease. The woman was pregnant, but miscarried at the fifth month, and coincidentally the progress of the eye trouble was arrested, although vision was much impaired. Contrary to the advice of her physicians, the woman became again pregnant, and miscarried in the fourth month. No casts were found in the urine, but there was pus. The patient remained for months an invalid, at length became suddenly jaundiced, and remained in this condition. The right lobe of the liver became enlarged until it extended to the pelvis. The other lobe was also enlarged. Appetite was good, but the patient grew worse until she looked just like a mummy, and finally she died.

Post mortem examination: The liver was found very large and pale. No microscopic examination has yet been made of it. The apex of both lungs was adherent and was of a peculiar texture, like India rubber, the lower portion of the lungs was normal. The heart pale, thin, mitral valves thickened symmetrically. The liver, when cut into, exuded serum abundantly. There had been previous to death hemorrhage from the bowels, and the whole body was in a bloodless condition. Right kidney: cortical portion much reduced; the left kidney showed the same peculiarity, but showed also in the central portion traces of former abscess. It was noted that the suppuration in the kidney, shown by the presence of pus in the urine, did not make the condition of the eyes worse.

Adjourned.

A. B. LYONS, M. D.,

Secretary.

JUDSON BRADLEY, M. D.,

President.

Health in Michigan.

For the week ending Aug. 23, 1884, the reports indicate that consumption, typho-malarial fever and rheumatism increased, and that intermittent fever and remittent fever decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending Aug. 23, were southwest; and compared with the preceding week, the temperature was higher, the relative and the absolute humidity and the day ozone less, and the night ozone the same.

Including reports by regular observers and others, diphtheria was reported present during the week ending Aug. 23, and since, at 12 places, namely, Armada, Alpena, Birmingham, Detroit, East Saginaw, Kalamazoo, Monroe, Northville, Pontiac, Stanton, Summit, South Haven; scarlet fever at 7 places, Armada, Bridgeton, Clayton, Cadillac, Detroit, Grand Rapids, Kalamazoo, Swartz Creek, Sand Beach; measles at Detroit.

For the week ending Aug. 30, 1884, the reports indicate that intermittent fever, remittent fever, cholera morbus, dysentery, inflammation of the kidney, and neuralgia increased, and that consumption and cerebro-spinal meningitis decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending Aug. 30 were west; and, compared with the preceding week, the temperature was lower, the absolute humidity

less, and the relative humidity and the day and the night ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending Aug. 30, and since, at 12 places, namely, Au Sable, Armada, Bloomfield, Detroit, East Saginaw, Flint, Grand Rapids, Kalamazoo, Oakland, Pontiac, Vassar, Warren; scarlet fever at 9 places, Au Sable, Armada, Detroit, Dorr, Fairfield, Grand Rapids, Ionia, Kalamazoo, Novi; measles at Detroit and Whitehall.

For the week ending Sept. 6 the reports indicate that tonsillitis increased, and that rheumatism, dysentery and erysipelas decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending Sept. 6 were south, southwest and west; and, compared with the preceding week, the temperature was higher, the absolute humidity and the day ozone more, the relative humidity and the night ozone less.

Compared with the average for the month of August in the six years, 1877-1882, erysipelas, rheumatism and bronchitis were more prevalent, and remittent fever, intermittent fever, dysentery and cholera morbus were less prevalent in August, 1884.

For the month of August, 1884, compared with the average of corresponding months for the six years, 1879-1884, the temperature was lower, the absolute and the relative humidity and the day ozone were less, and the night ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending Sept. 6, and since, at 13 places, namely, Armada, Bloomfield, Detroit, East Saginaw, Flint, Fowlerville, Grand Rapids, Hardy, Ishpeming, Kalamazoo, Mendon, Romeo, Vassar; scarlet fever at 10 places, Cadillac, Detroit, Dorr, Dowagiac, Fairfield, Grand Rapids, Howard City, Kalamazoo, Swartz Creek, Vicksburg; measles at Detroit and Whitehall.

For the month of August, 1884, the reports indicate that diarrhoea, cholera infantum, typho-malarial fever, cholera morbus and dysentery increased in area of prevalence.

Compared with the average for the month of August in the six years, 1877-1882, erysipelas, rheumatism and bronchitis were more prevalent, and remittent fever, intermittent fever, dysentery and cholera morbus were less prevalent in August, 1884.

For the month of August, 1884, compared

with the average of corresponding months for the six years, 1879-1884, the temperature was lower, the absolute and the relative humidity and the day ozone were less, and the night ozone more.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of August, 1884, at 27 places, namely, Aramo, Armada, Alpena, Au Sable, Bloomfield, Birmingham, Berlin, Detroit, East Saginaw, Flint, Grand Rapids, Groveland, Holly, Ishpeming, Kalamazoo, Leland, Maple Rapids, Manistee, Monroe, McBride, Northville, Oakland, Pontiac, South Haven, Summit, Vassar, and Warren; scarlet fever at 20 places, Albion, Au Sable, Armada, Bridgetown, Cadillac, Columbiaville, Clayton, Detroit, Dorr, Fairfield, Grand Rapids, Hastings, Hazleton, Ionia, Jasper, Kalamazoo, Novi, Stanton, Swartz Creek, and Sand Beach; and measles at 10 places, Detroit, Grand Rapids, Grand Haven, Kalkaska, Kalamazoo, Ludington, Manistee, Muskegon, South Haven and Whitehall.

For the week ending Sept. 13, 1884, the reports indicate that rheumatism and remittent fever increased, and that neuralgia, tonsillitis and scarlet fever decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending Sept. 13 were north; and, compared with the preceding week, the temperature was slightly lower, the absolute humidity, the relative humidity and the night ozone more, and the day ozone less.

Including reports by regular observers and others, diphtheria was reported present during the week ending Sept. 13, and since, at 11 places, namely, Detroit, Flint, Fowlerville, Hardy, Hastings, Hersey, Ionia, Kalamazoo, Marquette, Mendon, and Stanton; scarlet fever at 6 places, Detroit, Dorr, Fairfield, Grand Rapids, Ionia, Swartz Creek; measles at 2 places, Detroit and Whitehall.

HENRY B. BAKER,
Secretary.

Lansing, Sept. 17, 1884.

At Berlin, Prussia, the Minister of Instruction has been so impressed with the evidence bearing upon the evil effects of school life upon children in the higher grades that he has ordered a competent corps of ophthalmologists to make the required studies, extending over several years. A report is to be made of the progress of the work every half year.

Correspondence.

Editor Detroit Lancet:

DEAR SIR:—I must beg you, in justice to me, to accord me a few lines in reply to your comments on my letter of Aug. 12, published in your issue for September.

And first let me call your attention to a misprint in the second column, on p. 120, where your quotation reads, "he publicly stated to the association that this was shown to be groundless on my part." What I did write (correctly printed in the previous column), was, "this was shown to be a *groundless fear* on my part." I need hardly point out that this error, due no doubt to the carelessness of the printer, does me the injustice of making me acknowledge having uttered a falsehood; whereas, what I did acknowledge was simply to have drawn inferences from statements made to me officially, by the president of the board, which his subsequent statements to the association corrected.

I pass over your reiteration of the idea of my "grievances," which I have already stated I never had, and ask by what law or custom I was bound to lay my views before "a regular meeting" of the board, before taking any other steps to protect what seemed to me the interests of the association. The president of the board did not even acknowledge the receipt of my letter. I then sent copies of it to the members of the board, and subsequently to a few others. As to the "leaders" with their "numerous followers," to whom you refer, I know nothing. On the list of those to whom my letter was sent, I cannot find one who answers to that description.

Pray let me add that it was never in my mind for a moment to claim "a monopoly of honest conviction and fearlessness of judgment." You saw fit to attack me for my action as a trustee, and I defended myself by saying that it was taken in accordance with my sense of duty, and in obedience to my judgment. It seems to me that the association recognized the honesty of my action when they listened at all to my minority report, and when so large a vote was cast against laying it on the table. I am, sir,

Yours, etc.,

JOHN H. PACKARD.

[We cheerfully publish Dr. Packard's letter, as it furnishes additional evidence of the soundness of the views advanced in our editorial article on the difficulties of conducting "As-

sociation Medical Journals."—ED. DETROIT LANCET.]

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Suggestions for the Improvement of Medical Societies.

THEORETICALLY, no honest, educated physician doubts the supreme importance of medical societies. Practically a very large number act as if they were utterly indifferent to the development of or even existence of medical societies. As to the proportion of this latter class it is difficult to get exact facts. In Iowa the *Iowa Med. Jour.* says that less than one-third of the regular medical profession belong to medical societies. This leaves two-thirds to be classed among the indifferent. In Michigan we do not think that even one-third belong to medical societies. Other states will no doubt vary above and below this estimate, but on the whole we are inclined to think that of the entire regular medical profession not more than a quarter belong to any society. That it is desirable for all to belong to some medical society most will at once grant. That there are difficulties in the way is at once admitted. In sparsely settled districts, the distances between doctors are such that the meeting of even half a dozen is often impossible, or at most very difficult. A very considerable portion of the United States is still sparsely settled. But the mass of the doctors are not found in these districts. The mass of the profession live where the people live, and so are within moderate distances of each other. Besides, as proving that the difficulty is not one of separation by wide distances we have only to observe the number of medical men in the cities who belong to medical societies. Quite as small a proportion of these are society workers as of the country physicians.

Of local jealousies, of individual antagonisms, of pure laziness, of dislike for all scientific work, of inordinate greed of gain, by which one will not go to society meetings lest he lose a call, of these and divers other things of a personal character, we cannot speak, but each has its influence in checking the development of medical societies. Still, bearing all these obstacles in mind, what can

be done to increase the number and efficiency of medical societies of a local sort?

We answer: 1. It must be remembered that a medical society will not organize and conduct itself. Equally with all educational institutions it will require some one or more person or persons to plan the best modes for its conduct, and to stimulate each individual to bring forth his best work for the common good. It will probably be best for the organizing spirits of each locality to be very modest in all their efforts, so as to avoid awakening of jealousy, etc. In season and out of season they must labor, to develop harmonious work and fraternal feeling. In a large place it will be easier to find congenial spirits, than in a small place. Thoroughly congenial fellows greatly lighten the task. But even uncongenial persons may be induced to work together by persevering tact.

2. Each member of the profession should be taught, while a medical student, or failing in this at the earliest possible moment, the habit of a medical society attendance and medical society work. We are all largely creatures of habit. Medical society attendance after a little becomes also a powerful habit. Thus, those who cross the continent to attend the meetings of the A. M. A., do so mainly or largely because it has become a habit to them which they miss as they do their eating or sleeping. The thousands who do not attend these meetings who could attend, simply lack the habit. Hence the desirability of each doctor forming this habit at the earliest possible moment. The longer he waits the more likely he is to remain isolated during life.

3. Each young member of the medical profession should be encouraged to begin the habit of writing for medical societies. It may be that first efforts will not prove altogether entertaining to every member of the society. It may be that many papers will prove veritable bores. These results must be expected as incident to all educational processes. If medical societies be considered educational bodies, these unpleasant features will speedily disappear, and the best writers will remain, and increase in the power to write profitably and pleasantly for the average listener.

4. Medical societies should never be too large. Where weekly meetings can be held ten will make a profitable society. Twenty to twenty-five will be quite as many as can be accommodated. The reason for this is that in the couple of hours of the meeting only

this number can have a chance to take an active part in the discussion of the topic which may be before the body. It should be made a point for each one to take some active part in each meeting. Of course in societies which meet at longer intervals and for legislative purposes more than scientific, the matter of members has a different significance.

5. A little time devoted to the cultivation of the social nature is very desirable at each meeting. If it is possible to have a light lunch so much the better. If the membership be small and the members meet at one another's houses, the lunch part is readily disposed of. We venture the statement that no body of medical men sit down to a lunch at an evening and engage in friendly conversation without feeling drawn closer to one another.

We have not space to farther discuss this matter now. But we feel very strongly that in the present condition of the medical profession, all members who have a desire to practically advance its future interest as well as their own, will use every means in their power to make existing societies more efficient, and to organize as many more as is possible with the number of medical men who can be brought together.

A Note on the Famous Salernum School of Medicine.

The name of this institution is more or less familiar to every student of ancient medicine. Yet to the mass of the profession it is mainly a myth. In a pamphlet Dr. Henderson, of New York, has presented many points of interest, and from this we quote.

Salernum was a town located thirty miles southeast of Naples, Italy. The real origin of Salernum's medical school is shrouded in darkness. It began to come to public notice in the seventh century. The Benedictine order of monks contributed largely toward its foundation. Hence the early Salernian practice is mixed up with monkish ideas, as charms, relics of saints, etc.

The earliest writings of this school are contained in the *Compendium Salernitanum*. This contains the writings of many different persons. About one thousand and forty, Gariopontus published a work on practice of medicine, called *Passionarius Galeni*. Being on the route of the Crusaders, its fame was greatly extended by these wandering hordes. A work dedicated to Robert of Normandy,

a celebrated Crusader, had an enormous circulation for those days.

It was the most famous medical school of Europe during the twelfth and thirteenth centuries. The Emperor's edict of twelve hundred and twenty-four forbade the practice of medicine except to such as had been examined and certified to by the Faculty of Salernum. This faculty then contained ten professors. Three years were devoted in the curriculum to the study of logic, five years to the study of medicine. If thought worthy at the end of this course of eight years study the student received the title of Master.

Many works on clinical medicine, pharmacy, practice of medicine, surgery, etc., emanated from this school. We have not space to allude to them here.

Women equally with men shared in the privileges of this place of learning. They were teachers, writers, graduates. A monk who visited the school in one thousand and sixty says that he found no one able to equal his knowledge except a woman.

The decline of the school was due to its unyielding conservatism. It became so puffed up with its own conceit that it thought there could be no other source of knowledge than itself. Ancient methods and antiquated facts cast a shroud upon all its activities. It brought forth nothing new, it ceased to develop great men, and so fell behind in the race, the schools of Naples, Montpellier, etc., taking its place. Gradually its ancient fame ceased to protect it from the stern logic of events, and it sank quietly into deserved obscurity. In thirteen hundred and fifty Petrarch alludes to it as a memory of the past. In eighteen hundred and eleven a formal decree reduced it to the rank of a preparatory school.

The services which this school rendered to the dark ages cannot be too highly estimated. It connected the early ages of medical glory with the later ages. It preserved during a period of wildest desolation of all that pertains to human life the accumulations of the early fathers of medicine. On a large scale in an age that debased woman, it gave her an equal place with man in medical study and medical teaching and medical honors. Beyond a doubt, as greater interest arises in the medical profession respecting medical history, this school will take its place as among the few medical schools that have won the lasting gratitude of all ages of medical men.

The Surgical Service of the Wabash Railroad.

The care of their injured employees has been a vexed question among corporations, and perhaps by none so much as by the railroads. The peculiar nature of their duties expose the railroad men to great dangers. The sailors have in a measure been provided for by the government. Hospitals have been built at the government expense, and were maintained formerly by a tax upon each seaman; but now by a tax upon the vessel owners. In these hospitals, sailors are cared for when they can get to them. There is no good reason why the government should not do the same thing for railroad employes. But we fancy there would be strenuous opposition to the starting of such a scheme. The marine hospital service holds on by virtue of the inertia of its existence. Meantime it has occurred to one railroad surgeon, Dr. J. T. Woods, of Toledo, Ohio, to establish a regular service to the Wabash railroad, by which the employes should get the best help at the places where they were injured and the company avoid any burdensome expense, and the doctors get some compensation. He has endeavored to adjust the delicate relationships between these three parties. Judging by the reports of three meetings of the surgeons of the road, we infer that the arrangement has at least been satisfactory to the surgeons. We do not have access to the views of the railroad, or of the employes, so that we are unable to say that they also are well pleased. From our knowledge of Dr. Woods, we are led to believe that all parties are measurably well satisfied. This being established, the system has reached a stable foundation. We are not informed as to the details of the arrangements thus alluded to, so that we can only speak from evidence contained in the pamphlet before us. Railroad surgery is peculiar surgery. It must be learned largely by itself. Hence it is fitting that all the surgeons of a particular road should meet and present their special views and facts of experience for their mutual good. The report published shows that at three meetings, twenty-four papers were read. The discussion of the papers is not given, if indeed they were discussed. Each paper contains more or less of interest and value to all railroad surgeons.

The scheme is a new one so far as its successful operation is concerned, but there is no doubt that with proper tact and energy it can be made most advantageous to all parties

and form an epoch in medical railway service.

The Treatment of Immature Cataract.

The desirability of hastening the hardening of the crystalline lens after once it has become defective for sight, has long been recognized as a desideratum by operators. A few years since, Forester proposed a plan which had many followers. Briefly, it consisted in bruising the lens capsule. This bruising breaks up the integrity of many of the capsule fibres, and so hastens the time when the lens can be extracted. The plan of the operation is to evacuate the aqueous humor, and press the cornea down upon the anterior surface of the lens, making such rotatory movements as possible without injuring the iris. Many have reported their results by this method. Some have had better success than others. Some eyes have been entirely lost; some have suffered from attacks of iritis; so that on the whole, it has not come to be generally regarded as a safe operation.

In his address before the British Medical Association (*Brit. Med. Jour.*, Aug. 2), Dr. McKeon recommended a different procedure. Briefly, he injects into the eye and into the eye and into the lens capsule water heated to the temperature of the eye. His methods of injection are three; 1. The introduction within the capsule of a needle attached to an ordinary hypodermic syringe. If there be any part of the lens substance easily disturbed, the injection usually ruptures the capsule a little at the point of puncture, and washes out a good deal of the cortex. It is certain that it clears out masses which could not be readily removed, even by a scoop. This mode of injection is perfectly safe. 2. After removal of the nucleus, the introduction of water inside the capsule by gravitation from a bottle fitted with a tube. 3. The introduction of a similar terminal to that attached to the bottle, but fixed to the syringe. The latter two methods require a good deal of care, and involve the question of the force allowable, and the time during which the flow of water and syringing can be safely continued.

His experience during the short time he has followed it he sums up thus: It shortens operations, it puts aside scoops, spoons and curettes, does away largely with the tedious process of friction through the lids to remove the cortex, and enables me to undertake operations of which I previously should not

have dreamt. Fuller details are promised soon. Soon we shall have our confirmatory evidence, pro or con. The idea strikes us as feasible.

The Missing Link of the Cholera Germ Found at Last.

In his communications thus far Koch has been unable to show that his comma bacilli did produce cholera. Nor has he been able to demonstrate the early life history of the bacillus. In the *Brit. Med. Jour.*, Sept. 6th, we have the completion of the life history of the bacillus, given by Drs. Maurin and Lange. These observers have continued working at Marseilles and report that they have found a mucor, which they regard as the actual agent in propagating cholera. This mucor appears on the fourth or fifth day on the putrefying stools of cholera and on these only. It has the form of a mycelium, the tapering ends of which are surmounted by cup-shaped sporangia, which burst on the slightest agitation, discharging vast numbers of spores. These spores require for their germination contact with some putrid organic matter, when they develop into mucor of another form, an anærobium which they believe to be the immediate cause of the phenomena of the disease, and which again, in its turn sporifying, gives birth to the bacilli of Koch.

While the bacilli themselves are innocuous, when deposited on putrid matter in the air they develop the first mentioned mucor, and so renew the cycle.

The first mucor, unlike the bacillus, has the power in a high degree, of resisting the action of so-called disinfectants. It is not killed by ten per cent. solutions of nitric or hydrochloric acids. It vegetates freely in a solution of equal strength of carbolic acid. It can sustain any temperature up to three hundred and two degrees F., but above this it breaks up, as it also does in a ten per cent. solution of tincture of iodine. A specimen mounted in oil of turpentine went through its whole development up to the discharge of its spores.

The verification of these claims is looked for with the greatest interest.

A Decoction of Lemon as a Cure for Ague.

As a popular remedy the use of lemon has had considerable influence among the laity in certain portions of the world.

Lately it has been brought into prominence

by Dr. Conrad Tommasi Crudeli, Professor of Hygiene at the University of Rome, Italy. In his address before the Copenhagen International Medical congress he tells us that the decoction is prepared by cutting up one lemon, peel and all, into thin slices, which are placed in three tumblers of water and the whole boiled down to one glassful. It is then strained through linnen, squeezing the remains of the boiled lemon, and set aside for some hours to cool. The whole amount of the liquid is then taken fasting. Lemon juice or a decoction of lemon seeds are used in Greece and North Africa as a remedy for malarial fevers of moderate intensity. In Guadeloupe a decoction of the bark from the root of the lemon tree is used for the same purpose. These popular practices would seem to indicate that there is some anti-malarial virtue in the lemon tree. While it is useful in acute malarial disease it is especially valuable in chronic cases.

The doctor being convinced that the remedy had a positive value, persuaded some proprietors in the Roman Campagna to try it with their employes. The good effects here were conclusive. From these he gradually persuaded practitioners to test the treatment. The results of these quite extensive observations confirmed his first expectations.

In the interests of humanity we shall hope that farther observations shall confirm the anticipations of the distinguished Roman professor. If decoction of lemons will cure malarial poisoning it will be a relief to the cinchona trees.

Murder from Professional Jealousy.

Professional jealousy is a too common trait of medical as well as other men. The disastrous results of such jealousy are but too apparent in every considerable town. In large towns and cities it is the especial reproach of medical men. Lately a very sad case has passed through the Virginia court. One doctor was charged with having murdered another in his office at Tangier Island, Accomac Co., Va. The full details are given in the papers from which we abstract the facts brought out on the trial. It seems that a Dr. Walter, attended one course of lectures and then, as too many young men do, started to practice at the above place. He pleased the people and soon had a large clientèle. Soon he left to attend his second course and get his degree. While he was gone, Dr. Pitts

came and began practice in the same place. Dr. Walter returned on receiving his degree, and was sought for by many of his old patients. Professional jealousy was at once awakened. Bad words, etc., were indulged in. One day Dr. Pitts invited Dr. Walter into his office and locked the door. A quarrel took place in which Dr. Walter was killed. Owing to the local excitement the trial of the case was transferred elsewhere. Then Dr. Pitts was found guilty in the second degree and sentenced to eighteen years in the penitentiary. There is no doubt that the murder was the result of bitter prejudice and passion. It does not appear that medical men are more jealous than other men, but it would seem that a liberal education should teach a spirit of toleration and charity in the best sense of the term.

The Gross Memorial as Viewed by a Jefferson Graduate.

It seems that there is not entire unanimity even among the alumni of Jefferson Medical College, respecting the fitness of the proposed memorial.

In the *Med. Record*, Sept. 20th, a Jefferson graduate, prominent in western New York makes many statements bearing upon the subject, a few of which we quote. He has been soliciting contributions as member of the auxilliary committee. He says most Jefferson men are unwilling to help any movement which will, at the expense of the alumni only give another prize to be electioneered for in the Board of Trustees of the College. He says that so impressed were Professors Pancoast and Gross with the same idea that they left nothing out of their large estates to the school which so long honored them. He says that the three last appointments to the faculty of Jefferson were made notoriously for the following objects: First, to conciliate Philadelphia society, and second to draw students from the west. Fond as he is of his alma mater he is chagrined at the annually announced subterfuges which are published to appease the clamor for higher standards, and yet avoid any rock which will lower the fees of the faculty. Thus in its last announcement it offers a preliminary examination to such as intend to practice in certain states. He claims that the alumni should have a voice in the management of the college, if they are expected to contribute funds, etc., for its advancement.

The Prussian Government as Related to Microscopical Instruction of Medical Men with Reference to the Cholera Bacillus.

The Berlin correspondent of the *Brit. Med. Jour.* says that the minister of public education, worship, and medical affairs has ordered that a certain number of medical men be summoned each year to Berlin, to go through a course of study of two or three weeks, in order to learn the new methods of investigating bacteria, and micro-organisms, but chiefly to become practically acquainted with everything connected with the comma bacillus, according to Koch. The several Federal governments have been notified to select a number of medical men for this course, and notify them to be ready to proceed to Berlin when summoned.

This action has been taken in view of the fact that it is difficult for the average medical man to practically master the details of Koch's processes, and yet it is desirable that these processes be familiar to the great body of practicing physicians.

This is a new idea in government for it to summon medical men to its laboratories in order that they may be competent to treat certain diseases. Public money often goes for purposes less beneficial to the people who furnish the government money.

Fear as a Cause of Death.

The relation of so-called mental and moral processes to death and life are mostly unknown. Illustrations constantly occur in which no solution can be given of the real cause of death in harmony with demonstrated physiological or pathological facts. In the *Medical Press and Circular*, Aug. 13th, the following cases are given and vouched for by reliable authority:

Two young girls were at dinner at their home in Marseilles, when they were told that a special friend of theirs had died the previous night of cholera. At once they became very nervous and left the table precipitately, ordered a cab and told the driver to take them as fast as possible to the town of Aix, some distance from Marseilles. When the cab got outside the city the coachman looked through the window to ask the address of the place to which he was to go. He saw one of the girls in convulsions and the other utterly unconscious. In his turn the driver got frightened, abandoned the cab and ran

about like a madman. When the police, who were sent for, arrived and opened the cab they found one girl dead and the other dying. A little way up the road they found the coachman lying on his face, dead.

The Detroit Academy of Medicine.

This society has elected its officers for the coming year. For president it chose Dr. W. H. Long; for vice-president, Dr. J. E. Clark; for secretary, Dr. A. B. Lyons; and for treasurer, Dr. Judson Bradley. As a token of its kindly regard, the Academy made a present to the secretary of a purse of fifty-five dollars in gold. In his presentation speech Dr. Cleland alluded to the fact that the society intended to testify its appreciation of the solid worth of Dr. Lyons services by the selection of gold. The occasion was one of merry good feeling on the part of each member of the Academy, and the worthy secretary in particular. As will be apparent to the readers of the *DETROIT LANCET*, the Academy holds weekly meetings during seven months of the year. Active study of the several branches of medicine, and good fellowship are its two planks. All members of the profession are cordially welcome at its meetings and to its membership, if only they can practically endorse these two planks. We doubt not that under its new officers it will even more than in the past do its part in laboring for the development of the profession in all that is honorable and progressive.

Memoranda.

The price of the *Philadelphia Medical Times* has been reduced to \$2 a year.

In Scotland the almost universal demand is for seidlitz powders of double strength.

In the Canary Islands consumptives are looked upon as little better than lepers.

The Medico-Chirurgical College has consolidated with the Philadelphia Dental College.

Dr. Robert F. Rogers, late Professor of Chemistry in Jefferson Medical College, died Sept. 6.

Sir William Lawrence defined surgical cases as those which pay fees, all others are medical.

Of the 18,937 passengers carried across the Atlantic ocean to New York city during last June, 25 died.

Dr. G. Minges (*Journal Amer. Med. Association*), reports a case of tenia in an infant four weeks old.

The sponges used at Roosevelt hospital are made by enclosing absorbent cotton in mosquito netting.

Of each million persons Dr. Farr estimates that one would be alive one hundred and eight years after birth.

The Homeopathic Department of Michigan University graduated twenty doctors at its late commencement.

Cleveland is reported by the homœopathic medical journals as not favorable to homœopathy, while Blaine is said to be favorable to it.

The announcement of a Southern medical college says that after the first of October the janitor will meet all trains with a badge on his hat.

The Royal College of Surgeons, of England, will receive nearly a hundred million of dollars from the estate of the late Sir Erasmus Wilson.

The Baltimore Medical College is indulging in the luxury of an intestine war. It is probable that the result will be two colleges in place of the one.

A drachm of balsam of copaiba to an ounce of white vaseline makes an ointment popular with N. Y. ophthalmologists, in treating chronic conjunctivitis.

At the Copenhagen meeting of the International Medical Congress, there were thirteen hundred foreigners against eleven hundred at the last meeting in London.

The stamp act on patent medicine in England was passed to raise money to fight Napoleon. How many more generations will British conservatism endure its obvious evils?

Prof. P. L. Panum, M. D., of Copenhagen, wants formed an association of the physicians of all countries, with the aim of applying the facts of alimentary physiology to the practice of medicine.

The late meeting of the American Pharmaceutical Association appointed a committee to devise a plan for compelling manufacturers of patent medicines to publish the formulas of their preparations.

The Columbus, O., *Med. Jour.* announces that one of the largest stockholders in the Columbus Medical College has offered his stock for months in a leading newspaper for ten cents on the dollar. He is still waiting for his first sale.

In his will dated June 21, 1881, Dr. John G. Adams left five thousand dollars to the New York Academy of Medicine but he afterwards added a codicil revoking this bequest on account of the action of the academy with reference to the new Code.

Mr. H. Biroth, at the late meeting of the A. P. A., exhibited several bottles of pepsin put up in 1853 by Eben Owen, of Chautauqua Co., N. Y. In an accompanying circular he describes its origin, its nature and the method of taking it so as to digest food.

The *Medical News* says that it lately read in a German obstetric work, that a Detroit physician named "Jenkins" advised viburnum prunifolium in threatened abortion. Also, that in recent French works the Philadelphia gynecologist is named "Goodhell."

Dr. J. Collis Browne is dead. He was formerly a member of the British army, and devised the combination called "chlorodyne" for the cure of diarrhœal diseases. It is reported that this remedy secured to him a large fortune, as it was kept as a secret remedy.

The *Medical Record* says that some dentists circulate cards among physicians offering 25-per-cent of all money received from patients sent them by each doctor. It does not appear how extensive is this practice. In our portion of the country we have never heard of it.

Prof. Julius Cohnheim died in Leipzig, August 14. He was 45 years old. He will probably be best remembered by his contributions to the pathology of inflammation. The special discovery made by him was the migration of the white blood corpuscles during inflammation.

Dr. Schenck (*St. Louis Courier Med.*) says that in Shaw's Garden at St. Louis, parasites are killed by sprinkling the leaves with uric acid. The idea was obtained by observing that water from a cistern in which workmen urinated killed the parasites on the plants of a certain hot-house.

The *Denver Med. Jour.* says that there is one doctor for every two hundred and fifty people in Denver. Twenty new doctors have

located there within three months. Denver has a medical college, about thirty professors in medical colleges, six hospitals, and sufficient students to supply its wants.

Dr. Shoemaker, before the British Medical Association, said: "That among all medical journals the *British Medical Journal* has no equal." This is high praise, but we question whether his judgment would be confirmed by the judgments of the mass of medical journal editors and readers. Comparisons are not wise.

The price of quinine is very low; as quoted in a late number of the *Druggists' Circular*, it is given for the American sulphate one dollar and ten cents per ounce. Among the causes of this state of things, are the development of large plantations of cinchona trees, and the over production of the drug from the bark.

In a paper read before the British Medical Association (*British Medical Journal*), Dr. Madden reports several cases of children from two to eight years old suffering from the effects of alcohol. One had delirium tremens. The writer affirms that it is physiologically wrong as well as morally unjustifiable ever to allow a healthy child to taste alcohol.

Sidney Ringer in the *London Med. Record*, mentions some instances of the unusual action of nitrite of amyl. He says, In one case a woman after taking a drop turned deadly pale, felt very giddy, and became partly unconscious and remained so ten minutes. Again, a delicate woman, after one-thirtieth of a drop passed into a trance-like state.

Dr. Louis A. Sayre, of N. Y., gave his annual exhibition of the plaster jacket to the British Medical Association and the International Medical Congress. Either the profession must be dull or he indifferent in his manner of presentation, in order that so many lessons should be called for. Still he is always entertaining, and no doubt accomplishes much good in this way.

It has recently been decided that a suit for malpractice cannot be entertained by the court if previously a bill for services has been collected through a suit at law. The question of malpractice has been decided in the negative by the court deciding that the services must be paid for. Hence the surgeon may prevent a suit for damages by previously suing for his services.

A correspondent of the *Medical Press and Circular* says that "an American introduced himself to the king of Denmark, and expressed his pleasure in being in a country where there was only one king. In reply to the King's surprise he said: 'Because in America we are all kings.' The king at once held out his hand and said, 'I am glad to meet a brother, all in the same business?'"

Dr. C. H. Hall has been making some observations upon the water tenders in the fire rooms of ocean steamers. The subjects are exposed to a temperature of about 100° F. He observed that the cutaneous veins became swollen with blood, the pulse rose to one hundred and eighty per minute, and the temperature under the tongue to 103½° F. The respiration rose from eighteen to forty-two per minute.—Pro. N. Soc.

The *Medical Press* says that the Red Star line of ocean steamers has placed its surgeons in the second department of their ships. It is astonishing that any respectable doctor should submit to any such position. As a fact, we do not believe a really competent doctor would so submit. We have no pity for any who may submit. But we do pity the innocent passengers who commit their lives to the men who accept such indignities.

The *Chemist and Druggist* reports the following: "A woman had been a patient at the hospital, and took medicine home with her. Having some left over she gave it to an old lady, thinking it would do her good. The latter kept it by her in case of need. Some time afterwards her grandchild, three and one-half years old, not being well, received a dose of the medicine. Immediately afterward it was taken with convulsions, and soon died. The medicine contained strychnia."

Mr. G. Thomann, in a pamphlet published by the Brewer's Association, brings forward evidence obtained from the various insane asylums of the United States, to show that insanity is not promoted to any considerable extent by the drinking of alcohol. Dr. H. M. Bannister, in the *Psychological Journal*, examines the facts in the case and shows that, leaving aside any extreme statements of the temperance workers and their opponents, it may be said that there is no more potent factor in the production of insanity than the use of alcoholic drinks.

The late International Congress is described by one of the best English surgeons as a

most enjoyable picnic, but furnishing to science little that was new. Unquestionably this was the fact, as it generally has been with large medical societies. New facts cannot wait for medical congresses in order to be presented to the profession. They seek the medical journal. These have all the new facts long before medical societies can be organized. But the friendly converse over old facts and over tempting viands is both pleasant and profitable for the old and young.

The *British Medical Journal*, September 6th, says that the British laws compelling medical men to report infectious diseases to the local health officer, are of no advantage as the history of their operation shows; facts show that in various places the laws had to be altered so as to place the control of the patient in the hands of the doctor; concealment of disease has been promoted; untrustworthiness in returns is encouraged; distrust is excited between the doctors and their patients and conflict between the doctors and health officers. Abundant proof is given of these statements.

Dr. Draper (*Boston Med. Journal*) collects several cases in which slight wounds of the vulva were attended by death. His own case, a strong plethoric woman, died from a wound in the vulva an inch long and half an inch deep. Ogston reports a case in which a woman died in ten minutes after receiving two wounds about the genitalis. Taylor records a case in which from a wound of the vulva an inch and a half long a woman died in a quarter of an hour. In another case, from a bruised wound of the clitoris from a kick, a woman died in about three-quarters of an hour.

A young man went to the Cork city lunatic hospital and desired a written form. The clerk understood him to desire a form of committal. He said he wanted it for himself, then for his father, etc. He would not give his name. At last the officers became suspicious and took him into confinement until inquiry could be made. In a short time evidence appeared showing that the man simply wanted a form upon which to place his bid for furnishing the asylum with milk. He refused to give his name lest he might not have so good a chance in bidding for the milk contract. A comedy of cross purposes.

The *Iowa State Med. Jour.* says that of the two thousand doctors in Iowa, not more than eight hundred belong to medical societies.

It says that after watching the secular press of Iowa, it has come to the conclusion that there is need of a great moral reform in the tendency to advertising. It adds that legitimate advertising begins with good education, gentlemanly conduct, social qualities, industry, and ends with the moral effect in the community of good deeds, distributed by word of mouth from friends. All other advertising than this is to be condemned. We wish the *Journal* would create a reform in this matter that would extend beyond the borders of Iowa.

Messrs. Jansen McClurg & Co., Chicago, will issue about Oct. 1st, a new work on the "Principles and Practice of Medicine," by Dr. N. S. Davis. The work is not a compilation, but an embodiment of the observations, thoughts and experiences of the author during nearly fifty years of active medical practice. The matter is presented in the form of lectures delivered by him during the many years of teaching. The features which especially commend the work to the practitioner and student, are the fulness with which the clinical history of the various diseases is given, and the explicit and detailed description of the methods of treatment which have been found most effective. The author's adoption of the metric system of weights and measures is worthy of notice and commendation. Although this system has been advocated by leading scientific and medical societies, it has come into use only to a limited extent. To assist in affecting this change, Dr. Davis has used the metric system throughout the work, giving, however, in brackets, the equivalents in apothecaries' measure. The volume is about the size of Bartholow's "Practice of Medicine," but more closely printed.

Editor's Book Table.

Hart's Atlas of Female Pelvic Anatomy.*

This is one of the best contributions to the field of anatomy made in recent years. Dr. Hart's well known labors in the field, and his great interest in the subject, rendered it pe-

* ATLAS OF FEMALE PELVIC ANATOMY, by D. Berry Hart, M. D., Lecturer on Midwifery in the Edinburgh Medical School. New York: D. Appleton & Co., 1880. Cloth, pp. 100. For sale by John Macfarlane, Detroit.

cularly fitting that he should give expression to our latest knowledge of the anatomy of the female pelvis. When it is considered that there are many doubtful points in this anatomy, and that in many others, even the standard works are in error, both in their text and their illustrations, it becomes apparent that a new atlas is needed. This is a quarto of about one hundred pages. Thirty-seven of these are occupied by lithographs and wood cuts, mostly the latter. Each of these plates contains four or more figures. The larger proportion of these are new and original with the author, the others are taken from sources inaccessible to the ordinary practitioner. Besides these, and blended with the text, are a large number of wood cuts, illustrative to the text. When it is remembered that correct ideas relative to the female pelvic anatomy, lie at the basis of sound practice in either obstetrics or gynecology, the importance of this work becomes apparent. The work is indexed and a careful bibliography appended. After illustrating and discussing briefly the anatomy of each portion of the female pelvis, the writer gives some practical deductions. Thus in connection with the illustrations of the blood vessels of the pelvis seen from the side, he says:

1. In all incisions in the ischio-rectal fossa the knife should cut from the ischial tuberosity in. The internal pudic is out of harm's way, unless in incisions down to or near the rami.

2. Wounds of the labia minora, clitoris, and vestibule are very dangerous. When operated on, the cautery at a dull heat should be employed.

3. In Emmet's operation the circular artery of the cervix may be wounded, and must be secured by a stitch passed above it by means of a curved needle.

4. Ligature, including broad ligaments and vaginal fornix, guard against all hæmorrhage, provided the ligatures do not slip.

5. Wounds of the veins in the vaginal plexus may give rise to profuse and even fatal hæmorrhage.

6. The presence of the vast plexus already described explains the occurrence of pelvic hæmatocele and hæmatoma.

7. In the operation for vesico vaginal fistula there may be bleeding from the vesical plexus, if the operator pares the edges of the bladder too much.

After illustrating the vast complexity of the

lymphatics of the pelvic organs of the female, he adds the following practical suggestions:

1. In gonorrhœa, syphilis, and cancer of the vulva and lower fourth of the vagina, the inguinal glands enlarge.

2. In cervical cancer the inguinal glands do not enlarge as a rule until late in the progress of the disease, and then only owing to the communication between the obturator glands and the inguinal ones. For the same reason we may have the inguinal glands enlarging as the result of disease in the true pelvis.

3. The occurrence of large and hard inguinal glands in women should lead to the investigation of the genitals, vagina, and pelvis.

4. It is probable that in septicæmia we have micrococci passing along the lymphatics, setting up lymphangitis, penetrating the lymphatics in the peritoneal cavity, setting up peritonitis here, and ultimately penetrating the stomata of the diaphragm. The occurrence of peritonitis, pericarditis, and pleurisy in such cases is probably to be explained in this way. Of course we may have blood poisoning through the venous system.

5. The importance of cleanliness in all gynecological operations is necessarily imperative.

6. When we know the lymphatic nature of the uterus, when we remember that these lymphatics are rapid absorbents, the necessity of avoiding all unnecessary intra-uterine manipulations by the uterine sound is evident. Even if the advocates of the intra-uterine stem could give a much better reason for the faith that is in them than they do, we should be chary of its use.

7. The necessity of the careful treatment of abortion and the third stage of labor is evident. Bits of decidua, when left, act as dead matter, afford a nidus for putrefaction, and give the lymphatics something to absorb.

We cannot farther note the author's conclusions. In the light of the illustrations these become far more forceful. We trust this work may find its way into the library of every studious medical man. To the medical student it is simply invaluable. The publishers have issued the work in their best style, so as to render it ornamental as well as instructive.

Black on the "Formation of Poisons by Micro-Organisms."*

This little work is composed of two distinct portions. The first is a brief historical sketch of the investigations which have led up to our present knowledge of the relation of minute organisms to the causation of disease. The second is devoted to a development of the theory that these micro-organisms produce most of their effects through the poisons which they produce. Both portions have more than a common interest at the present time. We are sure they will be read with both interest and profit by all intelligent physicians. While it is undecided, he still believes that many of these poisons are in the shape of alkaloids. In the absence of a better theory this will prove at least useful as a working hypothesis. Our author certainly adduces many reasons why it should receive credence.

We quote the author's principal points made in his review of the germ theory of disease.

In the seventeenth and eighteenth centuries, intelligent observers of contagious diseases concluded that they were caused and propagated by a process identical with or similar to fermentation. There was much study of the processes of fermentation and decomposition, in order to arrive at a more clear understanding of the causes of epidemic and contagious diseases with a view of prevention and cure. These experiments demonstrated that the fermentations and decompositions were something different from ordinary chemical phenomena.

The yeast plant was discovered by Schwan and Latour, in 1838. These gentlemen distinctly announced that the chemical changes of vinous fermentation are caused by the life and growth of this plant. They disproved by experiment the previous hypothesis, that oxygen is the active agent in any similar processes. Reasoning from this discovery they came to the conclusion that all the fermentations, decompositions, miasms, and contagions were caused by life force.

These conclusions were attacked by chemists, notably by Liebig, who denied both the facts claimed and the conclusions arrived at.

*THE FORMATION OF POISONS BY MICRO-ORGANISMS. A biological study of the germ theory of disease. By G. V. Black, M. D., D. D. S. Philadelphia: P. Blakiston, Son & Co., 1884. Cloth, pp. 178. For sale by Phillips & Hunt, Detroit.

Since then there has been continuous discussion of the subject.

In 1854, Schroeder conclusively disproved the existence of gaseous ferments, claimed by chemists, by admitting air filtered through cotton batting to sterilized fluids without causing fermentation. From 1857 to 1861 Pasteur successfully worked out all the more ordinary fermentations by his fractional flask cultivations, and proved each of them to have a specific plant growth as its cause. He also showed that none of the decompositions could proceed without living organisms, though the specific organisms belonging to each was not clearly made out.

Basing his efforts on the results of the last two, Mr. Lister introduced his antiseptic treatment of wounds in 1865, which has proved a preventative for most of the dreaded infectious wound troubles in all hospital surgical practice.

Pasteur, Koch, and others, have succeeded in isolating a number of distinct disease producing germs, and causing the specific diseases in animals, regularly, by planting these germs under the skin, and Koch especially, has succeeded in doing this after freeing the organisms of all possible following of decomposing matter by growing them upon dry slides.

This much having been proved, the continued cultivation of numerous other organisms of distinct form and character, always associated with specific forms of disease, warrants the inference that these diseases are also caused by specific organisms. Thus is made out a strong chain of evidence that all contagious and infectious diseases are produced by disease germs.

This work is more suggestive than exhaustive in its dealing with subjects, but it is none the less worthy of attention.

Bramwell on "Diseases of the Heart and Thoracic Aorta."*

This is the most attractive work of its kind that has come to our notice for years. It is a generous work in its make up as well as in its matter. Its diction, its facts, its thought, its illustrations, all indicate that its author loves the study of these disorders, and so we have his best work. Most of the illustrations

*DISEASES OF THE HEART AND THORACIC AORTA. By Byrom Bramwell, M. D., F. R. C. P. E. With three Hundred and seventeen illustrations. New York: D. Appleton & Co., 1884. Cloth, pp. 783. For sale by John Macfarlane, Detroit, Mich.

are from cases that have been under his own care, hence there is an increased freshness to them. Of the three hundred and seventeen a considerable number are full paged lithographs. Unlike many writers the author has fully digested the work and writings of his predecessors and fellow-workers in this field.

The work opens with a brief and yet comprehensive account of the physiological anatomy and physiology of the organs. Especially does the author give the latest views of the modern workers in this field of research. Thus he gives Gaskell's researches. These show that in the lower animals the automatic action of the heart does not depend upon any special rhythmical nervous apparatus, but is due to a property of rhythmical contraction inherent in the muscular tissue itself. While it is not yet proven that the rhythmical action of the heart in man is due to the same cause, by analogy we may believe that it is. This being admitted we have the first step in the comprehension of the complicated movements of the heart. Then blood under pressure is the stimulus to the action of the heart fibres. Too low a pressure furnishes so slight a stimulus that the heart does not contract, or if the pressure be too great the heart is paralyzed. Between these two limits the heart muscle has a wonderful power of accommodating its activities to the resistance to be overcome in carrying on the circulation of the blood to every part of the body.

Again the experiments of Gaskell and Sewell show that in the frog, at least in the normal action of the heart, the motor impulse originates in the sinus, and passes from the sinus to the muscular fibres of the auricle and thence to the ventricle.

But the complicated nervous apparatus is not forgotten. In great detail its principal features are attractively portrayed, both by word and diagram, and other illustrations. Until quite recently our knowledge of the action of the nerves of the heart could be summed up by saying that impressions passing through the pneumogastric nerve retard, while impressions passing to the heart through the sympathetic accelerate the heart's movements. But late researches show that the action of the vagus affects the force of the cardiac contractions, and exerts a trophic influence upon the cardiac muscle. We have not space to give the reasons adduced in support of these views, but they will be read with interest by all who are not already familiar with them. As to the mode of action he thinks that the vagus acts directly upon

the cardiac muscle in many respects as a weak interrupted current. He shows that the vagus exalts and depresses all the different muscular tissues of the heart, whether the function be rhythm, contraction, conduction, tone or excitability. The depression of one function is not necessarily accompanied by a simultaneous depression of another function. Farther the exaltation of each function is not necessarily dependent upon a previous depression. To account for all these varied phenomena we must suppose that the vagus has two groups of fibres, or that the same fibre produces all the different observed effects according to the nature of the muscle it supplies and the condition of the muscle at that time.

In concluding his chapter upon the general pathology of the heart, he says, "We may lay it down as an axiom that in looking at cardiac cases, whether from a pathological or a clinical point of view, and more especially in considering the prognosis and treatment, it is quite as important to look at the system as a whole as it is to regard the condition of the heart in particular." He is the best physician who accurately gauges the nature and extent of the local lesion, and at the same time takes a broad and comprehensive all around view of the case. His chapter on the clinical investigation of cases of cardiac disease is a most suggestive one which no one can read without profit.

We have not space to farther present the writer's views as given in the several chapters upon the different heart lesions. Suffice it to say that they are all equally thorough and in accord with the best science of to-day.

The publishers have issued it in their elegant substantial manner.

Mackenzie on "The Oesophagus, Nose, and Naso-Pharynx."*

This forms the second volume by Mackenzie upon diseases of the throat and nose. The first volume includes the diseases of the pharynx, larynx, and trachea. It was published some time since. Still another volume is required to complete the series. This will include the diseases of the neck. For twelve years the author has been engaged in the

*DISEASES OF THE THROAT AND NOSE. By Morell Mackenzie, M. D. Vol. II. Diseases of the Oesophagus, Nose, and Naso-Pharynx. With index of authors, etc. Philadelphia: P. Blakiston, Son & Co., 1884. Cloth, pp. 550. Cloth, price \$3. For sale by John MacFarlane, Detroit.

preparation of these works, and he has had the assistance of many able workers in this field. This volume was entirely burned just as it was ready for sale. Fortunately the author had the proof sheets at his home. From these the work was again printed, and now at last appears to the profession. For many years the writings of Mackenzie have occupied a place in the confidence of the students of this branch accorded to but few authors.

Nearly one half of this volume is devoted to study of diseases of the gullet. Here we find gathered all possible forms of disease of this part of the body. As these affections are rare, the average student will be surprised as well as instructed at the variety of diseases here described. One peculiarity of each chapter in this as well as the remaining portions of the work is the great care given to a concise account of the history of the development of each disease. The account of the anatomy of each part also precedes the account of the diseases of the part. The portion which will excite most attention is that which treats of the nose and naso-pharynx. Here we find a most admirably condensed and yet complete account of every known affection.

In discussing hay fever he describes the views of Daily, of Pittsburg, and Roe, of Rochester, N. Y. These gentlemen claim that they are able to cure hay fever by removing certain growths or hypertrophies existing in the nares. Mackenzie says that his observations do not enable him to confirm these observations. Respecting the treatment of hay fever, he says that he has found but little benefit from local treatment. Some times certain applications are serviceable; in other cases the same applications make the patient worse.

While discussing entomozoaria in the nose, he quotes a case by Marechal, of Metz, in which a centipede, six centimetres long, was expelled from the nose after remaining there a year. The patient was a farmer's wife who had suffered from formication in the nostrils and copious discharge of mucus, often fetid and mingled with blood, and from severe headaches, the sensation being compared by the woman to repeated blows with a hammer. She was also troubled with constant lachrymation and vomiting. The patient often passed into a state of extreme excitement, and the least noise caused her great torture. There were periods of remission, but she had five or six severe attacks every day, and several dur-

ing the night. One of them lasted fifteen days without ceasing. At the end of the year the centipede was expelled alive.

Concerning the cause of the chronic catarrh of the naso-pharynx, the author thinks that it is multiple. Among these multiple causes he mentions the irritation of dust breathed and mechanically irritating the affected part. If the dust contained matter that acted chemically or through the micro-organisms in it, the results would be more pronounced. Baltimore specialists claim that it is the existence of a peculiar irritant formed in connection with the pulverization of the pavements of that city which produces the excessive prevalence of this disease in that city. The excessive use of condiments, he thinks, adds to the development of this disorder; also, the sudden change of temperature in passing from the heated room to the cold air of winter. It is more than probable that it is not so much the change of temperature as the bad air which the individual has breathed. As yet there is much uncertainty in the entire matter, as, indeed, there is respecting all the causes of any disease.

As a whole, it may be said that the book must find its way into the library of every specialist in this direction, and into the libraries of all who would keep pace with the onward march of progress in this direction. The charming style of the author renders the reading of the book a source of pleasure. The publishers have issued it in excellent style.

Bruce's *Materia Medica and Therapeutics*.*

This is the best condensation of these subjects that we have ever met. It is also written in such a manner as to interest even an indifferent reader. Considerable more than half of the volume is devoted to an account of the materia medica. Owing to a wise arrangement this space is made to contain most of the essential facts pertaining to both organic and inorganic articles of the materia medica. To illustrate, we at random turn to Ferrum. Each preparation is taken, and the few lines suffice to tell the source, character, impurities, and dose of each. Its incompatibilities are given together. Then follows an account of the action and use of iron. Under

***MATERIA MEDICA AND THERAPEUTICS.** An introduction to the rational treatment of disease. By J. Mitchell Bruce, M. A., M. D. Philadelphia: Henry C. Lea's Son & Co., 1884. Cloth, pp. 547. For sale by Phillips & Hunt, Detroit.

this head we find an account of its immediate local action and uses, both externally and internally; of its action on the blood and its uses; of its specific action and uses; of its local action and uses; and, finally, the actions and uses of the several preparations of iron. All this is given in about ten small pages. There are few doctors who would not be benefited by reading it, and to the student it is one of the very best and most valuable accounts of this drug that we have ever seen. In like manner each article of the *materia medica* is dealt with.

Then follows the therapeutical portion. Here, instead of showing how each remedy cures each disease, he shows each general and special function, and the effects of the several drugs upon the same. In this manner drugs are studied, in the way by which they enter the body, the changes they undergo, and the changes they induce, and the manner in which they are eliminated. In short, the effects of drugs are traced during their entire course through the body. To illustrate, we take at random the intestine. First our author considers its physiological relations; then the means of acting physiologically upon the intestine as food; the agents which act upon the intestinal blood vessels; the so-called drastics, astringents, and constringents; measures which influence absorption and excretion, as the saline purgatives and saline astringents; measures which influence the intestinal glands, as mercury, croton oil, etc., which increase their secretions; opium, lead, etc., which diminish the secretions; measures which influence the nervo-muscular structures, as aloes, senna, etc., which increase the activity, and morphia, lead, etc., which diminish this activity. Of agents acting upon the biliary secretion, he gives the direct as podophyllin, etc., and the indirect as the mercurials. He then takes up the pathological relations of the intestine under the heads of diarrhœa and constipation. The therapeutics of each of these conditions are stated in terms of the latest knowledge we possess. He fully describes enemata, and the agents that destroy intestinal parasites. The article ends with a table, presenting at a glance the arrangement of drugs, etc., already stated. The liver, the heart and circulatory apparatus, the respiratory apparatus, each other system, are all dealt with in the same general manner. We hesitate nothing in the belief that the careful study of the pages will be of infinite service

ty every medical student and every practicing physician. All of us are too much inclined to arrange therapeutic measures in a routine manner. To escape from this tendency there is no such antidote as compelling one's self to consider, respecting each drug administered, just the points here suggested. We trust, in the interests of scientific therapeutics, that this work may be widely studied. We shall then furnish less temptation to manufactures of "tongaline," "hydroleine," etc., and all other preparations of a similar nature.

The National Dispensatory. Third Edition.*

For many years there was but one work explanatory of the U. S. Pharmacopœia. Now there are three. The old Wood, the Stillé and Maisch, and the volumes issued by William Wood & Co., of New York. Two are published in Philadelphia, and one in New York. It used to be a wonder to us that the Pharmacopœia should be so constructed as to require a dictionary to understand it. But as we observed that each publisher issued a dispensatory which was an expensive book, while the pharmacopœia was a relatively cheap one, it seemed as if the one was made to fit into the other, and so, as a business enterprise, more money made from the profession and the druggists than there would have been had the dispensatory been self-explanatory. The result has been that the dispensatory has been the important book, as it contained all that was to be found in the pharmacopœia and more. But this is simply an incidental affair which will in time regulate itself. The correction is appearing in the multiplication of dispensatories as mentioned above. The pharmacopœia also, is gradually becoming what it should be.

Of the work before us, by Stillé and Maisch, nothing can be said but commendation. It is conveniently arranged, it is up to the times, it is thorough, it is comprehensive, it shows the work of men qualified for their work and

*THE NATIONAL DISPENSATORY, containing the natural history, chemistry, pharmacy, actions, and uses of medicines, including those recognized in the pharmacopœias of the United States, Great Britain, and Germany, with numerous references to the French Codex. By Alfred Stillé, M.D., LL.D., and John Maisch, Phar. D. Third edition revised, with numerous illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884. Pp. 1775; price, cloth, \$7.50; leather, \$8.00; half Russia, open back, \$9.00. For sale by Phillips & Hunt Detroit.

energetic and enthusiastic in its performance. Of its kind, it is a model book, worthy of a place in every medical and pharmaceutical library.

The edition before us embodies the contents of the pharmacopœias of the United States, Germany, and France. Thus it is very broad in its scope, including the three great nations of the earth. In addition to this it includes the British Pharmacopœia as it was last issued in 1867. In order that there should be the utmost accuracy of statement, a long series of researches have been prosecuted in order to establish the truth of such statement of facts as appeared in other works. Besides the officinal articles there have been introduced a large number of unofficinal articles, and thus the work has been rendered as complete as possible. Descriptions of drugs, etc., have been increased or diminished as the changes of our knowledge called for. An idea of the changes made may be gathered from the statement that thirty-seven hundred more references have been added to the general index of this edition. The illustrations have also been changed, and some eighty new ones added. The descriptions of the physiological actions of drugs have been changed to agree with the results of the latest investigations. About eighty pages have been added to the therapeutical portion of the work. The therapeutical index gives all the remedies used in treating any special symptom or disease. The doses are given both by the new and old system.

We cannot close this notice without expressing our gratification at the perfect manner in which the book is printed and made. The paper, type, and press-work leave nothing to be desired, for the pleasure and comfort of the eyes that shall read this book.

Jones' "Manual of Diseases of Women."*

The author tells us that this was intended for the use of the medical student and general practitioner. It is for such as expect to be general practitioners of medicine. For specialists in diseases of women there are other better books. But even for such his book will serve for the first lessons. In short, it is good as far as it goes, but only goes so

far as the general practitioner is compelled to go in his work. It is to fit in with his idea respecting general physicians and specialists. He thinks that there is but one specialty calling for such technical skill as to shut out the general practitioner from the treatment of most of the cases involved in it. This is the branch of ophthalmology and otology. He thinks the modern division so much into specialties, has had a harmful effect upon all branches of the medical profession. It is with this idea that he has prepared this book. In it he has placed all the knowledge required by the general practitioner for the treatment, as well as diagnosis, of all ordinary cases of disease. Ovarian tumors, vesico-vaginal fistula, and other surgical cases requiring operations which call for unusual manipulative skill he has omitted, as coming outside of his plan.

It suffices to say that he has carried out his plan with his usual ability and tact. For students and general practitioners it will form an admirable introduction to the works of Thomas, Emmet, and others of similar scope. Or if it is not desired to acquire such a wide and technical knowledge it will suffice for the common cases of uterine disease. Having mastered the contents of this book he will be able to successfully meet all the usual requirements of practice.

Report of the Michigan State Board of Health for 1883.*

The first thing noticeable about this volume is its smaller size as compared with former volumes. On turning over the pages the reason for this is apparent. The papers and discussions presented at the several sanitary conventions held by the board at different cities in the State during the year have been omitted. The reasons for this are clear. Much of the material heretofore published has been of great interest to the average lay reader. The very fact that it was largely non-technical made it all the more understandable by the average citizen. It is just possible that it was so much in thought like the contributions of former years that it was omitted, in order to avoid repetition. The largest portion of the volume is occupied by elaborate meteorological reports of Michigan, and the weekly reports of diseases prevailing

*PRACTICAL MANUAL OF DISEASES OF WOMEN AND Uterine Therapeutics. For students and practitioners. By H. Macnaughton Jones, M. D. New York: D. Appleton & Co., 1884. Cloth, pp. 410. For sale by John Macfarlane, Detroit.

* ELEVENTH ANNUAL REPORT OF THE SECRETARY of the Michigan State Board of Health, for the year ending Sept. 30, 1883. Lansing, Mich. 1884. Cloth, pp. 262.

in different parts of the State. The effort is made to put the two together, and thus show the actual climatic elements in opposition to the diseases prevailing at any particular locality. Very many suggestive deductions are thus reached which will interest all who are seeking for the causation of disease. The problems thus involved are exceedingly intricate and call for wondrous patience in order to reach any satisfactory conclusion.

Communicable diseases, including diphtheria, receive a proportionate amount of attention. The minutes of the several meetings of the board we have published from month to month, as also the deductions from the weekly reports of prevailing diseases. The illustrations are very instructive. Altogether the report reflects great credit upon the secretary of the board and all his assistant workers.

Gallatin on Chloral Hydrate in the Treatment of Diphtheria and Croup.*

There is much in this work that has no relation to its title, being simply a statement of the observations of others. The author tells us that since 1875 he has treated more than five hundred cases of diphtheria by chloral hydrate, with a total mortality of less than two per cent. Previously, under the common treatment, his mortality had been over twenty-five per cent.

He advises chloral in all cases in place of the iron and quinine mixtures. He gives it in small doses, sufficient to induce a quiet, somnolent state. To a child five years old he gives about thirty-two grains in twenty-four hours. The treatment is begun on the first visit, and continued until all exudation has disappeared. The author does not give cases in detail, or even in tables, in substantiation of his remarkable statements. Had he done so, his statements would have attracted greater attention from the mass of the profession. At present we must depend upon his simple statement. To have treated five hundred cases of diphtheria with but ten deaths, is a feat worthy of the most ardent therapist. Doubtless, others will try the use of chloral and make an exhibit of their observations.

* **DIPHTHERIA, CROUP, ETC., OR THE MEMBRANOUS DISEASES.** Their nature, history, causes and treatment; with a review of the prevailing theories and practice of the medical profession. Also a delineation of the new chloral hydrate method of treating the same, its superior success and its title to be considered a specific. By C. B. Gallatin, M. D., J. H. Vail & Co. 1884. Cloth, pp. 174. For sale by Jno. Macfarlane, Detroit.

Green's Pathology and Morbid Anatomy. Fifth American Edition.*

After so many editions of a work have been issued, there is little occasion for comment on the appearance of a new edition. Respecting this, it suffices to say that a careful examination shows that the author has gathered into it the latest facts and theories pertaining to this subject. By these the book has become larger than the former edition. This will not be regretted by any reader, and surely not by the earnest medical student.

In view of the recent interest in bacteria, the chapter upon these and all other parasites which infest the human body, will be read with interest. Of course the subject is not discussed exhaustively, but with sufficient fullness to place the principal facts clearly before the reader.

Ziemssen's Motor Points of the Human Body.†

This is composed of wood cuts of the different portions of the body, with marks indicating the points at which electrical currents may be applied so as to stimulate special nerves. The cuts are not new, but their separate form is such as to render them more accessible to such as are not familiar with these motor points. They are made after very accurate studies by Ziemssen, and are anatomically correct. In different individuals there are no doubt considerable variations, but with this as a guide there will be little difficulty in applying the galvanic current to any special nerve in the body.

Baskett's Visions of Fancy.‡

This is a book of poems. As the poems are not medical in their thought, they lie outside the limits of our work. Indeed, being neither a poet nor the son of a poet, our poetical powers are extremely limited and our capacity of judgment is equally limited. Hence we pass the book to the consideration of those more gifted in such matters.

* **AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY.** By T. H. Green, M. D. Fifth American, from the sixth English edition. With one hundred and fifty engravings. Philadelphia: Henry C. Lea's Son & Co. 1884. Cloth, pp. 481. For Sale by Phillips & Hunt, Detroit.

† **ZIEMSEN'S MOTOR POINTS OF THE HUMAN BODY.** By Herbert Tibbits, M. D. New York: J. H. Vail & Co. 1884. Quarto, pp. 7. For sale by John Macfarlane. Detroit. Price, \$1.25.

‡ **VISIONS OF FANCY.** A poetical work, by N. M. Baskett, M. D., St. Louis, Mo. 1884. Cloth, pp. 106.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Physiology.

MECHANISM OF DEFECATION.—Dr. Hart (*Anatomy of Female Pelvic Organs*, p. 88) gives the mechanism of the expulsion of the contents of the rectum thus: We have relaxation of the anal sphincters, and contraction of the longitudinal muscular fibres of the bowel which are attached to the fixed point below. The circular fibres of the rectum, especially the sphincter tertius, contract, and intra-abdominal pressure drives the rectum down, causing the pelvic floor to bulge markedly. The rectal contents are thus elongated and driven down, partly by intra-abdominal pressure, but more by the circular fibres and downward eversion of the rectal mucous membrane, until they are brought within the anal canal, where intra-abdominal pressure completes their expulsion. Relaxation of pressure now takes place, and the levator helps to reinvert the protruded mucous membrane. The part of the bowel below the sphincter tertius is especially engaged in defecation; the contraction of the so-called third sphincter limits the eversion of the mucous membrane of the bowel, as well as helps on the passage of the rectal contents, and forms an upper boundary to the rectal ampulla on which intra-abdominal pressure acts. It is probable that during the expulsion of the rectal contents the part of the bowel below the sphincter tertius is pulled somewhat forward.

Nervous Diseases.

CORTICAL LESIONS OF THE BRAIN.—Dr. M. Allen Starr, of New York, in the July number of the *American Journal of the Medical Sciences*, has collected the American cases of lesions of the central region of the brain, and carefully studied their localized symptoms. He finds that:

Disturbance of general sensation—including the senses of touch, pressure, pain and temperature, together with the sense of the location of a limb—may occur either in the form of subjective perceptions of such sensations without objective cause, or in the form of impairment of these sensations. In either case it indicates a disease in the central convolutions, and possibly in the adjacent portion of the parietal lobules.

The power of voluntary motion of the muscles of the opposite side of the body is located in the two central convolutions which border the fissure of Rolando. Motions of the face and tongue originate in the lower third of this region; motions of the arm, in the middle third; motions of the leg, in the upper third.

Spasms in, or paralysis of, a single group of muscles may indicate disease of its motor area. Extensive spasms or paralysis may indicate a large area of disease in this region, but if more marked in a single group of muscles than in others it may indicate a small focus of disease in the motor area of that group, affecting other motor areas indirectly and coincidentally. Paralysis following spasm in one group of muscles is a characteristic symptom of disease in the central region.

Disturbance of the power of speech indicates disease in the convolutions about the fissure of Sylvius on the left side in right-handed persons, and on the right side in left-handed persons. If the patient can understand a question and can recall the words needed for a reply, but is unable to initiate the necessary motions involved in speaking, the disease is probably in the third frontal convolution and in the adjacent portion of the anterior central convolution. If the patient cannot recognize spoken language, but can repeat words after another, or can use exclamations on being irritated, the disease is probably in the first temporal convolution. If the patient can understand and can talk, but replaces a word desired by one that is unexpected, the disease is probably situated deep within the Sylvian fissure, or in the white substance of the brain, and involves the association fibres which join the convolutions just named.

Gynecology.

STUDIES IN INTERNAL ENDOMETRITIS.—At a late meeting of the New York Academy of Medicine (*Medical Record*) Dr. Mary Putnam Jacobi read an elaborate paper on the above subject, in which she submitted the following propositions:

1. The essential part of the utero-ovarian system is the endometrium, which may appropriately be called a germinative membrane, because it is the seat of the process of germination of embryonic elements.
2. The utero-ovarian system may be said to have no function.
3. The reproducing tissues generally as-

sume new properties or functions at certain epochs, and continue their manifestations with the single property of growth until the menopause. So with the ovaries before the menstruation is established, the process of growth is continuous; subsequently the process sustains a series of interruptions, by means of which the changes and processes that occur during their period of activity are deflected into cyclical movements. There are two cycles: the lesser, menstruation; the greater, pregnancy.

4. The homology between these two cycles is complete.

5. The characteristic of the greater cycle is subinvolution of the uterus and its annexæ, namely, the ovaries and the venous plexuses contained in the broad ligaments. The characteristic disease of the lesser cycle is subinvolution of the endometrium after menstruation.

6. In both cycles the physiological process of growth is initiated in the endometrium. Menstruation is initiated in the same tissue, and the cause of failure in this regard is to be sought there. Chronic metritis in the multiparæ or nuliparæ originates in endometritis which implies subinvolution of the endometrium.

7. Parenchymatous diseases of the uterus depends upon diseases of the lining membrane or the membrane covering the surface.

8. Nearly all other utero-ovarian diseases may be summarily traced to diseases of this germinal membrane. Diseases of the ovaries are due, in a large proportion of cases, to original trouble in the endometrium. Even neoplasms begin in a deviation in the processes of growth taking place first in the endometrium. Diseases of the uterine cervix may be primary.

9. Thus, with the exception just named, utero-ovarian affections should be regarded as unique, the real disease being subinvolution of the generative membrane with its consequent complications.

10. Utero-ovarian disease is a deviation of the process of growth habitually sustained in the utero-ovarian tissues. The most common is called inflammation, and toward the close of the active period of menstrual life the deviation may be exaggerated and terminate in the development of neoplasms.

11. The ultimate object of all treatment of utero-ovarian disease must be restoration of the integrity of the normal processes occurring in the endometrium, which may be affect-

ed either directly or indirectly, the object remaining essentially the same in either instance.

12. Both for the success and safety of local treatment of endometritis, it is essential to take into account rhythmic change, of which it is the seat.

THE FEMALE BLADDER AND URETHRA—PRACTICAL REMARKS FROM THE LATEST ANATOMICAL STUDIES.—Dr. Barry (*Anatomy Female Pelvic Organs*, pp. 15) concludes his illustrated sketch of the subject thus:

1. The occurrence of the two shapes of the bladder can only be explained by supposing that the bladder contracts during the expulsion of urine. Hence we have to differentiate three different states of the bladder viz.: (a) An empty relaxed condition, during which the urine is trickling into it. (b) A contracted condition; and (c) A period of relaxation following the contraction. The bladder thus has a systole, a diastole, and a relaxed state.

2. The systole of the bladder explains the intractability of cystitis. The cystic bladder from the irritability of its mucous membrane contracts often, sometimes every five minutes, and thus the bladder gets no rest.

3. The loose attachment of the bladder to the pubis permits of a great range in its position. Thus in the non-parturient female the empty bladder lies in the pelvis behind the pubis and usually to one side. It is drawn up out of the pelvis into the abdominal cavity during the first and second stages of labor. It is tilted up into the abdomen by the four and one-half months gravid uterus, or by a retro-uterine, extra-uterine gestation. Abdominal palpation may therefore mislead as to the amount of distension of the bladder.

4. The female bladder has no prostate gland, and the entire urethra acts like a sphincter.

5. The urethra is eminently dilatable, so that the index finger can be passed through it without permanent incontinence. This is of great value in diagnosis. But the farther dilatation of the urethra so as to bring about a paralysis of the sphincter for the relief of cystitis is bad practice. It is far better to make an artificial vesico-vagina fistula, as this is readily cured, while such a condition of the urethra is not easily cured.

THE GENU-PECTORAL POSITION.—PRACTICAL REMARKS ON ITS ANATOMY.—Dr.

Barry (*Anatomy Female Pelvis*) concludes his exposition of the anatomy of the genu-pectoral position thus:

1. The observations of Sims upon the dilatation of the vagina in the genu-pectoral posture showed him that proper speculum examination should open up the pelvic floor. With his speculum he placed the patient in a semi-prone position, admitted air to the vagina and drew back the sacral segment with the speculum.

2. The genu-pectoral position is awkward and inconvenient, and only useful in ovarian congestion and displacement of the gravid retroverted uterus.

3. To replace the gravid unfixed retroverted uterus, the patient is placed in this position after the bladder has been emptied, and pressure made upon the fundus through the rectum; or the vulsella may be used at the same time to bring down the cervix. The genu-pectoral position alone does no good.

4. The semi-prone position fulfils all the requisites necessary, and is to be used for the genu-pectoral position during the passage of Sims' speculum and certain operations.

Otology.

HEMORRHAGE FROM THE LACHRYMAL DUCT DURING EPISTAXIS.—Mr. D. Hoadley Gabb, M. R. C. S., describes the following remarkable case, *Brit. Med. Jour.*: "Mr. S., aged 50, with mitral disease and albuminuria, sat out one of our recent sunny days, and caught a chill, which culminated in an attack of bronchitis and a relaxed state of the fauces and uvula, producing severe spasmodic cough; during one of these paroxysms, epistaxis, from the right nostril especially, came on rather profusely, and I was sent for. There was no difficulty in arresting it by plugging the anterior nares with dry lint. In two or three hours, after a severe cough, the hæmorrhage returned, and a messenger was sent for me, saying the bleeding had come back, and was running out of his nose and eyes; and so I found that the blood had welled up through the right lachrymal duct, and was suffusing his eye, so that he was constantly obliged to wipe it, and the handkerchief was pretty well stained with the blood, and the discharge only ceased when the nose left off. I have never met with the phenomenon before, neither have others to whom I have mentioned it; and so, I think, perhaps it is worth recording."

CERTAIN STATES OF THE BLOOD DETERMINED BY THE OPHTHALMOSCOPE.—Jæger (*Cincinnati Lancet and Clinic*), gives a summary of some very important researches. The blood columns of the fundus of the eye being the only ones which can be directly appreciated and observed by our visual apparatus, makes the observations all the more important.

Jæger divides mankind into three classes, consisting of individuals whose veins, seen ophthalmoscopically, are either enlarged, increased in width in proportion to the size of the arteries; again of the same size, and others again only slightly increased, or smaller. The larger the vein, the slower the stream of blood, and the longer the blood remains in contact with the tissues through which it passes. On the contrary, if small, there is less blood, the current of blood is faster and it is less time in contact with the tissues. The first he considers as phlegmatic individuals, the second class as lively, both physically and mentally.

Ophthalmology.

THE SIGNIFICANCE OF FLUORESCIN FOR THE EXCHANGE OF LIQUID IN THE EYE.—Drs. Schöler and Uthoff (annual report for 1881, Berlin, 1882, *Med. and Surg. Reporter*), from a careful study of this subject, arrive at the following results:

1. Under normal conditions the iris does not cut off the communication between the anterior and posterior chambers, the aqueous humor being constantly renewed from the latter.

2. A current passing from the vitreous through the zonula of Petit's canal and the iris into the anterior chamber does not exist.

3. The anterior surface of the iris does not take part in the renewal of the aqueous humor, which is derived from the blood-vessels of the ciliary body and the posterior surface of the iris, the "secretory angle." This current gives rise to Ehrlich's line, which always begins behind the iris at the edge of the pupil.

4. The secretion from the "angle" does not take place simultaneously over its whole surface.

5. The greater part of the current which exists in the eye flows along the iris through the pupil into the exterior chamber, a smaller portion of it going into the lens through

Petit's canal, and into the vitreous. Vitreous and anterior chambers are, therefore, not separated from each other.

6. If the fluorescein, before its discharge, has passed the vascular system of the eye (subcutaneous injection), only a small part of it enters the lens and vitreous, the effect of which soon disappears. If, however, it is injected into the anterior chamber, a large proportion is absorbed by the lens; but when injected into the vitreous, it enters the lens only when it has passed into the anterior chamber.

7. The colored fluid is absorbed by the lens from the corticalis toward the nucleus, and disappears in the same order. The innermost parts of nucleus become colored only after two or three weeks.

8. The vitreous does not participate in the nutrition of the lens, as the latter remains uncolored for days, though the whole vitreous is deeply stained, provided the aqueous humor has not previously become colored. The latter event, after an injection to the vitreous, favored and produced as it is by an increase of tension in the vitreous and a decrease in the anterior chamber, does not take place through physiologically pre-existing paths.

9. Opening the anterior chamber (puncture, sclerotomy, iridectomy) changes both the quantity and the quality of the fluid discharged from the secretory angle, and in this manner influences the nutrition of the lens and vitreous.

10. The secretion of the aqueous humor is controlled by nervous influence. Division of the cervical branch of the sympathetic nerves, with or without excision of the superior cervical ganglion, causes the appearance of the colored secretion in half the normal time, and decreases the quality of the secreted liquid. The subcutaneous injection of fluorescein is, therefore, a new method of determining tropho-neuroses of the eye, which thus far could not be diagnosticated. Secretory and oculo-pupillary fibres of the sympathetic nerve spring with separate roots from the spinal cord, so there are special secretory nerves for the eye.

11. Intra-cranial division of the trigeminus hastens, increases, and changes the secretion of the eyes still more than division of the cervical branch of the sympathetic nerve.

12. As division of three-fourths of the nerve in the posterior section of Gosser's ganglion does not alter the secretion of the eye, provided the most medial part be preserved,

the secretory fibres must be within the medial fourth.

EYE DISTURBANCES IN TABES DORSALIS.—Schmeichler (*Archiv. Ophthalm.*, Dec., 1883) concludes an exhaustive study thus. It may be emphasized that it does not often happen that a tabetic patient during his life remains free from eye disturbances. They either manifest themselves in an affection of the optic nerve, or in disturbances of the inner or outer eye muscles.

1. The optic nerve atrophy is characterized by the sharply contoured discolored papilla with its peculiar vascular relations, by the at first rapid and then gradual diminution of visual sharpness, by the concentric limitation of the field of vision, by the characteristic state of the color sense (diminution and absence of color sensibility). Only the visual acuteness and the condition as regards color perception give distinct evidence of the status and progress of the affection.

2. The disturbances of the pupil consist in reflex and total iridoplegia, in myosis characterized by its reaction to atropine, and finally in pupillary inequality.

3. The paralyses of the eye muscles develop gradually and disappear slowly. They rarely remain for life, and may recur after having disappeared; they are found with no other disease of the spinal cord.

HOW IS THE CORNEA NOURISHED.—Dennisen (*Archiv. Oph.*, Dec. 1883), after a careful study of the work of others, has added researches of his own so that he regards the present condition of our knowledge thus:

1. The cornea is not nourished from the anterior chamber, but by the surrounding vessels of the sclera.

2. The nourishing liquid is conducted in the vessels through the fibre bundles and fissures of the sclera to the corneal margin, where it is distributed throughout the entire thickness of the cornea by means of the lacunæ and fissures, and finally is discharged into the anterior chamber.

3. The current in the cornea moves from the periphery towards the centre and from the surface towards the interior.

4. The stomata of the epithelium of Descemet's membrane also serve to discharge the liquid which has served its purpose.

5. The anterior chamber is an enlarged duct for discharging the lymph vessels of the cornea.

6. In Bright's disease the œdema of the cornea is mainly due to a closure opening into the anterior chamber.

7. When Schlemm's canal is closed (on account of swelling) the cornea is also thickened; its spaces are distended with liquid, while their physiological form remains unchanged, and if Schlemm's canal again becomes permeable, the cornea returns to its normal condition. In morbus Brightii the œdema is more marked; the distended spaces tear and form larger cavities. The cornea loses its shape in consequence, and returns to the normal condition with great difficulty.

8. The physiological theory of the cause of œdema (Magendie, Cohnheim, Lichtheim) does not explain the œdema of the cornea; the theories of Ranvier and Roth, however, are satisfactory.

9. The dimness of the fundus and the reduction of vision must not be referred to retinal changes only, but also to pathological changes in the cornea.

10. The detachment of the endothelium in metastatic irido-choroiditis is due to an accumulation of liquid between the elastic membranes and the endothelium.

11. The cells of Descemet's membrane may contribute to the increase of the hypopyon, but do not cause it.

12. In the horse and other animals, whose retinae contain no blood vessels, the retina is nourished as in birds.

UNILATERAL ALBUMINURIC RETINITIS.—Yvert (*Recueil d'Ophth. Edin. Med. Jour.*) reports a very interesting case of unilateral albuminuric retinitis occurring in a man 43 years of age. He had a profoundly cachectic appearance, with general anæmia; the urine was found to contain a considerable quantity of muco-pus and albumin. Ophthalmoscopic examination of the eyes showed the right one perfect, but the left one exhibited well-marked and advanced nephritic alterations; also a degree of amblyopia. The intra-ocular changes were confirmed at the autopsy. The right kidney was found absent, not a vestige of artery, vein or ureter to be found. But the supra-renal capsule was in its usual place. The left kidney was enlarged by half, weighing 11½ ounces. It presented the characteristic appearances of parenchymatous nephritis. Yvert refers to five cases published by Prof. Potain in the *Gazette des Hôpitaux*, for February 17th, in which the contusion of one kidney was followed by an anæmia in all

cases much more marked on the injured side. Taking these with his own cases, he puts forward the view that any irritation proceeding from one kidney is capable of acting through the sympathetic on the whole capillary system of the corresponding side, bringing about circulatory disturbances as well in the retina as elsewhere.

INTRA-OCULAR PRESSURE, EFFECTS OF ATROPINE AND ESERINE UPON IT.—Holtzke has recently studied this question in an experimental way. Using cats' eyes, he introduced into the anterior chamber Lieber's canula. This accurately registers all variations in the pressure within the anterior chamber. He then applied atropine and eserine to the eyes with the following results:

1. Atropine has no direct power to raise the pressure, but the dilation of the pupil which it induces produces considerable increase.

2. Eserine raises the intra-ocular pressure considerably, but the myosis which it induces acts in the opposite direction and to such an extent that ultimately the pressure is reduced below the normal.

Under physiological conditions the pressure rises with the dilation and falls with the contraction of the pupil. Vascular pulsation was observed to cause pressure changes in the eye, varying from hardly perceptible movement of the mercury to a maximum oscillation of 2 mm; the effect of the pulsation was more marked when the intra-ocular pressure was high, than when it was low.

Respiratory efforts caused an oscillation amounting to one-half mm. Compression of the aorta raised the pressure to the extent of six to ten mm. Division of the cervical sympathetic caused contraction of the pupil, and a fall of pressure amounting at most to six mm. Electrical stimulation of the upper cut end caused wide dilatation of the pupil and corresponding rise of pressure.

HOW DOES ATROPINE LESSEN INTRAOCULAR PRESSURE?—Dr. Tweedy, in the *Practitioner*, answers this inquiry thus:

a. In the healthy eye with a natural anterior chamber, by contracting the radial fibres of the iris, diminishing the calibre and contents of the arterioles of the choroidal, ciliary and iridian vessels and lessening the amount of fluid secreted by the ciliary body.

b. In acute iritis with effusion and adhesions between the iris and anterior capsule of the crystalline lens, by contracting the dis-

tended blood-vessels and emptying them of the accumulated and stagnant blood, by dilating the pupil and diminishing the bulk of the ciliary body and iris, by lessening secretion, favoring the absorption of the inflammatory products, checking cell proliferation and transmigration of leucocytes, by breaking down adhesions and opening up the communication between the posterior and anterior chambers of the aqueous humor, and thereby liberating the fluids pent up behind the iris, and permitting them to make their escape by the spaces of Fontana and the canal of Schemm.

HOW DOES ATROPINE INCREASE INTRA-OCULAR PRESSURE?—Dr. Tweedy answers thus:

- a. When the anterior chamber is shallow, and the periphery of the anterior layer of the iris lies near or touches the posterior layer of the cornea, so as to obstruct the spaces of Fontana; under these circumstances the contraction of the radial fibres of the iris tends to pack the iridian tissue into the narrow angle of the anterior chamber and thus stop the escape of fluids from the anterior segment of the globe.
- b. In some cases where the anterior chamber is deepened by effusion, as in aquo-cap-sulitis. Its action here is, however, slight and uncertain and variable.

Diseases of the Skin.

LEPROSY.—Drs. G. H. Fox, of New York, and Graham, of Toronto (*Medical Record*), after a visit to Tracadie, in New Brunswick, where there are, at present, twenty-four inmates confined in the lazaretto, which is under the charge of the Sisters of Charity, submit the following propositions:

1. Leprosy is a constitutional disease, and in certain cases appears to be hereditary.
2. It is undoubtedly contagious by inoculation.
3. There is no reason for believing that it is transmitted in any other way.
4. Under certain conditions a person may have leprosy and run no risk of transmitting the disease.
5. It is not so liable to be transmitted to others as syphilis in its early stage. There is no relation between the two diseases.
6. Leprosy is usually a fatal disease, its average duration being from ten to fifteen years.

7. In rare instances there is a tendency to recover after the disease has existed many years.

8. There is no valid reason for pronouncing the disease incurable.

9. Judicious treatment improves the condition of the patient, and often causes a disappearance of the symptoms.

10. There is ground for the hope that an improved method of treatment will in time effect the cure of leprosy, or at least it will arrest and control the disease.

POLYMORPHOUS CHANGES OBSERVED IN THE TUBERCULAR SYPHILIDE.—Dr. R. W. Taylor (*Medical Record*), in a paper read before the American Dermatological Society on the above subject, made the following points of interest:

1. Its resemblance to psoriasis.
2. The colloid degeneration of some of the tubercles, concomitantly with the increase of the granulation tissues in others.
3. The degeneration of the colloid tissue into pus, and the formation of bullæ.
4. The evidence offered that these bullæ may appear in a syphilitic subject, though they result from degeneration of tissue, rather than from effusion of serum and pus, as occurs, as a rule, in simple pemphigus.
5. The development of tubercles having thick, imbricated, conical, epidermal crusts appearing like rupia.
6. In the suggestion offered by these lesions, that perhaps the psoriasis rupioides of authors is more or less dependent upon syphilis.
7. The formation of the true rupia crusts from the bullæ above spoken of.
8. The fact that non-ulcerated tubercular syphilide may be the starting-point of severe and extensive gummatous infiltration.

Therapeutics.

CANNABIS INDICA; A VALUABLE REMEDY IN MENORRHAGIA.—Mr. J. Brown, of Bacup, observes (*Brit. Med. Jour.*):

"Indian hemp has been vaunted as an anodyne and hypnotic, having the good qualities of opium without its evils. Also in dysmenorrhœa and insomnia it has not proved of much benefit. The drug has almost invariably produced some marked physiological effect even in small doses. Text-books give the dose as ten minims and upwards, but five minims is the largest dose that should be given at first. If bought from a good house,

the drug is not inert or unreliable. A drug having such marked physiological action ought to have a specific use as a therapeutic agent. Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason, it ought to take the first place as a remedy in menorrhagia, then bromide of potassium and other drugs. The *modus operandi* I cannot explain, unless it be that it diverts a larger proportion of blood to the brain, and lessens the muscular force of the heart. A few doses are sufficient; the following is the prescription: *℞. Tincture cannabis indicæ ʒxxx; pulveris tragac. co. 3j; spiritus chlorof. 3j; aquam ad ʒij.* One ounce every three hours. Four years ago I was called to see Mrs. W., aged 40, multipara. She had suffered from menorrhagia for several months. Her medical attendant had tried the ordinary remedies without success. Indian hemp was given as above. Its action was speedy and certain. Only one bottle was taken. She was afterwards treated for anæmia, due to loss of blood. Twelve months after this my patient sent for a bottle of the 'green medicine.' I learnt afterwards that she had sent this medicine to a lady friend who had been unsuccessfully treated by another medical man for several months for the same complaint. It proved equally successful. The failures are so few, that I venture to call it a specific in menorrhagia. The drug deserves a trial. It may occasionally fail; this, however, is not to be wondered at in a complaint due to so many different causes, and associated with anæmia and other cases of plethora."

Robert Batho, M.D., M.R.C.P., Castletown, Isle of Man, writes in reference to the same subject: "Considerable experience of its employment in menorrhagia, more especially in India, has convinced me that it is, in that country at all events, one of the most reliable means at our disposal. I feel inclined to go further, and state that it is *par excellence* the remedy for that condition, which, unfortunately, is very frequent in India.

"I have ordered it, not once, but repeatedly, in such cases, and always with satisfactory results. The form used has been the tincture, and the dose ten to twenty minims, repeated once or twice in the twenty-four hours. It is so certain in its power of controlling menorrhagia, that it is a valuable aid to diagnosis in cases where it is uncertain whether an early abortion may or may not have occurred. Over the hæmorrhage attending the latter

condition, it appears to exercise little force. I can recall one case in my practice in India, where my patient had lost profusely at each period for years, until the tincture was ordered; subsequently, by commencing its use, as a matter of routine, at the commencement of each flow, the amount was reduced to the ordinary limits, with corresponding benefit to the general health. Neither in this, nor in any other instance in which I prescribed the drug, were any disagreeable physiological effects observed.

"I could say a few words in its favor, as to its action in allaying irritative cough, but I prefer confining myself to a point on which experience has left me no room for doubt."

THE OXYTOCIC ACTION OF QUININE.—Mr. Hartigan, M.K.Q.C.P., of Hong Kong, writes (*Brit. Med. Jour.*):

"In three different cases I have had on several occasions to discontinue the use of quinine, because it brought on 'labor pains,' though the doses used were small, varying from three to five grains. In one of these, during a previous pregnancy, another medical man used quinine, and discontinued it for a similar reason. All three were in fair general health, suffering only from slight malarious fever, and had never aborted. One case has come under my notice in which abortion took place without apparent cause, after a ten-grain dose of quinine. The patient was the mother of several children, had not previously aborted, was in good health, and took the quinine to cure facial neuralgia. I know of another case of abortion occurring under similar circumstances after quinine. This action of the drug is known to the Chinese, who take it (I am told with success) for the purpose of producing abortion, following its use by copious draughts of hot tea. I have myself heard a Chinese 'amah' (*i.e.*, female servant), recommend it. Quinine certainly, in some cases, increases the menstrual flow."

THE TREATMENT OF MEMBRANOUS CROUP.—Dr. Jacobi (*Medical News*, July 19, 1884.) concludes a discussion of this subject thus:

The mercurial treatment of membranous croup promises good results. The bichloride appears to be the best preparation for this purpose. The remedy should be given early and frequently repeated. The bichloride should be well diluted (about 1 to 3000). To babies about half a grain should be given in twenty-four hours, and, as a rule, its administration could be kept up for many days, if

necessary, without bad effects. Stomatitis or salivation is very rarely observed, and gastrointestinal disturbances are not frequent under its use. If any unpleasant consequences result from the bichloride, inunction by the oleate of mercury is advised in its place. If the treatment of the diphtheritic disease be undertaken in time, the croup may often be prevented, as this is believed to be due to descending pharyngeal diphtheria.

Practice of Medicine.

ON THE AETIOLOGY OF PHTHISIS.—Dr. J. Andrew, in his third lecture in the Lumleian course (*Brit. Med. Jour.*, April 19, 1884), gives his conclusions in regard to the contagiousness of phthisis, as follows:

1. The historico-geographical argument is insufficient to prove that the present distribution of phthisis is brought about by the carriage along lines of human intercourse, of a special morbid germ. Indeed, many of the facts under this head are distinctly antagonistic to any such theory.

2. Before the discovery of the bacillus, one and all of the reported causes of phthisis were inadequate to account for its distribution, or for the anatomical and clinical characters of the disease.

3. These causes, even those which appeared to act as exciting causes, were all predisposing causes only.

4. From the nature of these predisposing causes, their relation to each other, and the conditions under which their influence seemed to make itself felt, it was a probable inference that phthisis belonged to the group of specific febrile diseases; and this view was held by some writers in the face of many difficulties and perplexities.

5. The facts on which this inference was based were insufficient to prove that phthisis was personally contagious, and were, indeed, rather opposed to any such notion.

6. The discovery of the bacillus proved that phthisis was a specific febrile disease; and thus the question of contagion cannot now be usefully discussed without acknowledging this fact.

7. As some specific febrile diseases are contagious, and others not so, this property existing in very different degrees and modes in different members of the group, the question as to the contagiousness of phthisis can only be satisfactorily answered by determining its affinities with other members of the

group, and by distinct evidence of its contagiousness.

8. Although phthisis may be undoubtedly produced in many ways, experimentally, in animals and also in man, there is not sufficient evidence to prove that its prevalence is materially affected by direct contagion.

9. In many most important respects it very closely resembles ague.

10. It is at least highly probable that the exciting cause of phthisis, like that of ague, the bacillus, or some other micro-organism, is in no way dependent upon man for its existence, and is widely diffused, irrespective of human agency.

From these I may be allowed to make one short practical deduction, viz., that the prevention of phthisis, like that of ague, is to be attained by sanitary works, especially by improved ventilation and drainage, and not by isolation; and that, for its cure, as we should not send a case of ague to the Pontain marshes, so, too, it would be wise not to send a case of tubercular disease to any place where the death-rate from phthisis is high among the native population.

ANÆSTHETIZATION WITH NITROUS OXIDE AND AIR, OR NITROUS OXIDE AND OXYGEN UNDER PRESSURE.—Dr. E. P. Howland (*New York Medical Journal*), of Washington, read a paper before the American Association for the Advancement of Science, in which he gave the result of a large experience in the use of nitrous oxide as an anæsthetic and demonstrated the process. This agent alone could not be used for long operations, but if air or oxygen were mixed with it in sufficient quantities to prevent asphyxia, it would not only produce anæsthesia, but if mixed and given under pressure the result would be all that could be desired.

The following are his conclusions:

1. Nitrous oxide, administered under pressure, and mixed with oxygen, produces within a few seconds a profound insensibility.

2. Under these conditions, life may be indefinitely sustained without the least danger of asphyxia.

3. In augmenting or diminishing the pressure, the danger of anæsthesia may be regulated at will, and with mathematical precision. Therefore there is no danger of any of the accidents incurred through the use of chloroform or ether.

4. When inhalation of nitrous oxide and

oxygen is stopped, the patient recovers consciousness in a few seconds and feels no consequent discomfort.

5. Nitrous oxide is merely dissolved in the plasma of the blood and escapes when inhalation ceases.

6. Its use causes no trouble to nutrition and no change in the chemical composition of the organs or cessation of their functions.

7. The action of compressed air upon the operator and his assistant need not be feared. Compressed air is very efficacious in the treatment of catarrh of the mucous membrane of the nose, the eustachian tube, and the respiratory organs.

8. By reason of these facts, a mixture of nitrous oxide and oxygen is superior to ether or chloroform, whether we consider its profound anæsthetic effect or its freedom from injurious results.

9. If the pressure of the air chamber is rightly and properly regulated, it is absolutely impossible for the patient to run any risk from the anæsthesia alone.

10. In all that concerns the application of nitrous oxide and oxygen to surgery, the scientific phase may be said to be exhausted and the anæsthetic agent should be henceforth used for operations instead of ether or chloroform.

THE VITALITY OF THE CONTAGION OF SCARLET FEVER.—The following remarks were made by Dr. Austin Flint, Sr., at a meeting of the New York County Medical Association (*Med. News*, May 31, 1884):

In 1862, he said, a case occurred in a New York boarding house. As soon as the child was able to be moved it was taken away, and the rooms occupied by the family were thoroughly cleansed. In three days afterward, another family moved into the same apartments, and in two days a child belonging to the latter was taken with the disease.

Dr. Flint then related the case of Miss G., the daughter of a deceased New York physician, who had been well known and highly esteemed in the community. Having entered the protestant sisterhood of St. Barnabas, she was called upon to nurse a child suffering from scarlet fever, and after she had finished her attendance on the child, she hung up her clothing to air several weeks. She then gave away the waist of the dress she had worn, and put the skirt away in a trunk. It was in February, 1870, that she nursed the scarlet fever patient, being in attendance for ten days. In January, 1871, she wore the skirt for the first

time, and one week afterwards was herself attacked with acute diffused nephritis and pulmonary œdema, which proved fatal. The lesson of these cases, therefore, was the necessity for effective disinfection in all cases of scarlet fever.

Dr. Flint also mentioned the fact that for fifteen years he had used the cold bath, in appropriate cases, with very satisfactory results.

At the same meeting, Dr. E. G. Janeway related the case of a physician in New Mexico, who, after having attended a scarlet fever patient, had occasion to go to see a patient in a town twenty miles distant, in which, as he subsequently took special pains to inquire, there was no scarlet fever; yet, one week after his visit, the disease appeared in the family which he had gone to see. Similar instances of the carrying of the contagion for long distances had been reported in the *Practitioner*, by physicians living in the rural districts in England.

DIGESTIVE ALBUMINURIA.—Dr. S. M. Rendall (*Edinburgh Medical Journal*) gives a most excellent account of our present knowledge of the albuminuria of digestion. His final conclusions are:

1. There is in such cases as described a true hæmatogenous albuminuria, in the sense that it is produced by an alteration of the blood plasma; not by any change in the kidneys or their blood pressure.

2. The alteration in the plasma is intermittent, and may be attributed to the introduction of an imperfect form of albumen into the blood current.

3. The imperfect form of albumen is the result of some disorder in digestion or assimilation, for the albuminuria is only found after the ingestion of foods, but the nature of the disorder is yet doubtful.

4. The intermittent digestive albuminuria is not associated with any renal disease or change, but an important question is to discover if the condition may lead to any ultimate change of structure if it be not checked by appropriate treatment.

5. The prognosis is favorable in such cases, if they are not neglected, but receive appropriate treatment.

6. The treatment should consist in the administration of drugs which augment organic combustion, in change of air, regulated diet, and rest from all bodily or mental disturbance.

SCARLET FEVER OF THE FÆTUS IN UTERO, AND OF THE MOTHER AT THE NINTH MONTH OF PREGNANCY.—Dr. Chas. A. Leale (*Med. News*, May 31, 1884) concludes an interesting paper on this subject as follows:

Scarlet fever may attack the fœtus in utero.

Scarlet fever of the new born child has like manifestation as when it occurs later in life.

Scarlet fever may attack the woman during pregnancy, and also immediately after child-birth.

Scarlet fever is exceedingly fatal to the woman during pregnancy and during parturition.

Scarlet fever rarely, if ever, affects the parturient woman if she has had a previous attack.

Scarlet fever causes death in the parturient woman by coma, exhaustion, or by convulsions.

Scarlet fever being a self-limited disease, is best treated by relieving dangerous symptoms, and in accordance with the rules of hygiene.

Scarlet fever only exceptionally occurs during the ages that women bear children; therefore, the proportion of those liable to contract the disease during pregnancy and child-birth, must necessarily be small.

Scarlet fever and septicæmia are distinct diseases, being unlike in many respects.

THE BACILLUS TUBERCULOSIS.—At a meeting of the Philadelphia County Medical Society, held May 21, 1884 (*New York Med. Jour.*), Dr. Shakespeare defined, in the discussion of Dr. Formad's paper on tuberculosis, his position on the ætiology of tuberculosis somewhat as follows:

He believes that, under favorable conditions, the power of the tubercle bacillus to cause tuberculosis is established. He thinks it possible that other agents, also, may cause the disease, but that this has not yet been proved. He believes that, under favorable circumstances, tuberculosis is an infectious disease, and that the tubercle bacillus is the infecting agent. He sees in the tubercle bacillus an important means of differential diagnosis in obscure cases. Taken altogether, he views the matter from almost the same standpoint that Koch does.

DECAY OF HOSPITAL TEACHING.—The *New York Medical Journal* recently contained an editorial on the above subject, which closes

as follows: "No doubt it is more attractive to pass one's time is striving after manual dexterity, than in the more homely study of constitutional conditions, and to this fact we may impute the growing neglect of the good old habit of 'walking the hospitals.' It must be allowed, indeed, that the latter was often carried out in a perfunctory way, but none the less is there reason to think that the systematic study of cases of acute disease, day after day, would make men really good practitioners with far more certainty than any amount of manipulative training."

OCCURRENCE OF A RARE HUMAN TAPEWORM (TÆNIA FLAVOPUNCTATA).—Dr. Jos. Leidy, of the University of Pennsylvania, describes in the *American Journal of Medical Sciences* for July, 1884, the *tænia flavopunctata*, a rare human tapeworm, which has now been observed for a second time, both cases occurring in this country and infesting children. It is not improbable that the species is more common than the observations would warrant us in believing, for from the smallness of the worm and the generally prevailing ignorance of the distinctions in the more common species, it might readily be passed for immature portions of these.

Dental Surgery.

THE USE OF THE GUM LANCET.—J. Morgan Howe, M. D. (*The Independent Practitioner*, Nov., 1883), has an article under the above head, and in closing says:

"There are instances, however, in which all such (hygienic) means are insufficient, affording at best but partial and transitory relief; the child gives frequent evidences of oral suffering, or of nervous irritation by reflex disturbances; in some such cases the gum lancet affords the means of rendering the most prompt and efficient relief. Its use is clearly counter-indicated in such early stages of teething as when the advancing teeth are probably obstructed by alveolar tissue, but when the enlarged gum indicates both to sight and feeling the presence of the tooth beneath it, when the former tissue has a tense appearance (whether it is sore, swollen and red, or not), with the disturbances before referred to, which more general treatment has failed to relieve, a free incision through the gum to the tooth, with a sharp lancet, will in most instances be promptly followed by very marked amelioration of all symptoms of irritation. We have repeatedly performed

this trifling operation with such salutary results, in very few instances without them. The ineffectual use of the lancet may prove a mistaken diagnosis, or that the irritation proceeded from teeth less advanced in development than those released by the incision; it does not prove that dentition is incapable of producing irritation which may, through reflex action, endanger life. The instances, however, in which gum lancing is not followed by relief, when it has been indicated by the conditions and symptoms, are so rare that it may be regarded as one of the most certain and effectual of minor operations, and so far as we know is contra-indicated only by a hæmorrhagic diathesis.

"The objection, urged sometimes, that the gum will be made much harder (if it should heal) by the formation of a cicatrix, and the temporary relief hoped for be followed by an aggravation of the difficulty of absorption of the gum, is invalid, from the fact that a cicatrix is not found after gum lancing, and if there should be a formation of cicatricial tissue it would absorb more readily than the primary tissue.

"The valid objection to the lancing of the gums of teething children is the "almost indiscriminate" practice of it, which Dr. Barrett believes is "falling into desuetude." There are probably few who will not be glad with him, and hope that all other practices that approach the indiscriminate may find the same limbo; but judicious gum lancing, practiced with discrimination and judgment, not for the purpose of depleting a congested gum but to release an imprisoned or obstructed tooth, is both reasonable and commendable, and its value should not be overlooked.

"Cases of obstructed eruption of wisdom teeth often demand local treatment.

"Those whose position in the angle between the body and ramus of the jaw causes them to be covered with a mass of soft tissue, which is not absorbed sufficiently to prevent it becoming inflamed by the pressure of the growing tooth and of antagonizing teeth in the superior jaw, may be made less troublesome by proper lancing, but permanent relief is only obtained, in many instances, by the removal of the tooth for which nature has failed to provide a place.

"Extraction must also frequently be resorted to when neuralgic or other disturbances arise through the obstruction of the wisdom tooth by the second molar, or by the latter together with the maxillary ramus, or when

the former is tipped forward so that its progress is arrested by the second molar. When the third molar occupies so nearly a horizontal position that the crown is in contact with the neck of the second molar, the extraction of the former is often an impossibility, without resorting to an entirely inexpedient operation, and in such case the removal of the second molar, the obstructing tissue, must be chosen as the least evil.

"But wisdom teeth placed anomalously in the maxillæ not unfrequently attain to complete development before meeting in their advance such resistance as to cause pulp irritation with local and reflex disturbance, and as interference is not demanded, it would unquestionably seem to be a blunder."

Surgery.

GASTROSTOMY, ŒSOPHAGOSTOMY, INTERNAL ŒSOPHAGOTOMY, COMBINED ŒSOPHAGOTOMY, ŒSOPHAGECTOMY, AND RETROGRADE DIVULSION IN THE TREATMENT OF STRICTURE OF THE ŒSOPHAGUS.—The frequency of carcinomatous obstruction of the œsophagus in middle life, and of cicatricial, or fibrous stricture, particularly in subjects of tender years, has led Dr. Samuel W. Gross to collect in the July number of the *American Journal of the Medical Sciences*, the somewhat numerous and scattered instances of the various operations which have been practised for their relief, and elaborately study and compare their relative value and disadvantages. To fulfil this object intelligently he has considered separately carcinomatous and simple strictures.

The four operations applicable to carcinomatous strictures are gastrostomy, œsophagostomy, internal œsophagotomy, and œsophagectomy, of which the first three are palliative, and the last curative.

From the consideration of 194 cases of operative procedure, Dr. Gross finds that gastrostomy has proved to be the simplest, most rational, and safest of the four operations for the relief of carcinomatous stricture. Increasing experience demonstrates that the results are growing better and better, which cannot be said of œsophagostomy; and there is every reason to believe that the successes will become more numerous if it is resorted to as soon as the diagnosis of the disease has been made, and before the powers of the

patient are materially impaired. The few deaths do not constitute an argument against its adoption; while, "every recovery is a clear gain; and a fatal issue is simply the natural termination forestalled."

The operations which have been practised for cicatricial stricture are gastrostomy, œsophagostomy, internal œsophagotomy, combined œsophagotomy, and retrograde divulsion. Dilatation, Dr. Gross holds is merely a palliative remedy, and sufficient time has not yet elapsed to test the value of divulsion through an opening in the stomach. Combined œsophagotomy for strictures near the cardia is only applicable to children, and may prove of value in strictures impassible by instruments introduced through the mouth. Internal œsophagotomy, if performed at all, should be reserved for comparatively recent and short strictures, and œsophagostomy is only applicable when the incision can be made below the obstruction. Gastrostomy, he holds, is the best and safest operation for simple stricture of the œsophagus.

From the great difficulty of managing cicatricial stricture in children by dilatation, which is due partly to the struggles of the subjects, and partly to the disinclination of the parents to distress the child, Dr. Gross holds that dilatation should be resorted to only when the inflammation has subsided, and the denuded surface is in a granulating condition. When the constriction is of some standing, and efforts at dilatation prove fruitless, gastrostomy will prove to be the safest and most beneficial operation for prolonging life.

Dr. Gross gives elaborate statistics, based on 271 cases, in regard to operative interference for obstruction of the œsophagus.

ON OPENING AND DRAINAGE OF ABSCESS CAVITIES IN THE BRAIN.—The antiseptic method of operating and after-treatment has not as yet been fully tested in operations upon the brain. This is natural, for not only have we inherited a just dread of dealing with an organ, the large majority of whose diseases are dangerous or fatal, but, our knowledge of the physiological functions of the brain and of their pathological modifications being extremely limited, we are not in a position to form such an accurate diagnosis as calls for surgical interference. Drs. Christian Fenger and E. W. Lee, of Chicago, in an extremely interesting paper on this subject, in the July

number of *The American Journal of the Medical Sciences*, consider the treatment of traumatic cerebral abscesses, and report a case which was successfully treated by opening and drainage.

Bergman, in discussing the treatment of cerebral abscesses, unhesitatingly sets it down as an axiom that wherever there is an accumulation of pus, trephining is most clearly and indubitably indicated, for the opening of an abscess in the brain is as necessary as in any other part of the body, and we would add even more so. A correct diagnosis of abscess having been made, the further difficulty presents itself of locating it with sufficient accuracy, so as to be able to find it. A number of cases are on record, in which a correct diagnosis had been made, the trephine also put on more or less at the right place, but the knife or trocar being passed into the brain, nevertheless missed the abscess. Drs. Fenger and Lee show by their case, that this difficulty can be obviated by multiple exploratory aspirations, performed at interstices sufficiently small to prevent any abscess from escaping detection, even if the trephine opening should not have been made at the point of the skull nearest the abscess.

There are on record a large number of cases of cerebral abscess, in which trephining was performed, pus evacuated, and temporary relief obtained; but later relapse followed, and a fatal termination ensued. It is possible, judging from the success the practice has met with in the treatment of abscesses in other situations, that drainage of the cerebral abscess-cavity, with or without washing out, would have saved some of these cases, by preventing the reaccumulation of pus and the continuous infection of the surrounding brain tissue, the acute œdema of which is well known to be, as a rule, the final cause of death. As far as Drs. Fenger and Lee are aware, draining and washing out of cerebral abscess-cavities has heretofore not been tried; that it can be effected and without any detriment to the patient, is shown by their case, the treatment of which they hold strictly conforms to the rational methods of modern surgery in treating abscesses in general; and because of this, and not because their patient recovered, they regard the case as answering affirmatively the question: Is it probable that abscesses in the brain can be treated advantageously on the same principles as abscesses in other parts of the body?

DETROIT LANCET.

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Original Communications.

Notes on Muriate of Cocaine, the New Eye Anæsthetic and Mydriatic.

READ BEFORE THE DETROIT ACADEMY OF
MEDICINE BY LEARTUS CONNOR, A. M.,
M. D., OPHTHALMIC SURGEON TO
HARPER HOSPITAL.

COCA for years has been known by the profession as a remedy having a peculiar power to prevent fatigue and invigorate an exhausted nervous system. For a year or more it has been used to diminish the sensibility of the vocal cords during operative maneuvers. Very recently, Dr. Koller, a medical student at Vienna, observed that, locally applied, muriate of cocaine diminished the sensibility of the conjunctiva and cornea. Impressed with its possible value to ophthalmologists, he gave a bottle of a two-per-cent. solution to Dr. Brettauer to exhibit at the late meeting of the International Medical Congress, at Heidelberg. Dr. H. D. Noyes, of N. Y., was present at this Congress, and writes to the *Medical Record*, Oct. 11th, an account of the experiments which he saw performed in the presence of several oculists. The solution of muriate of cocaine used was of two-per-cent. strength. Two drops were placed in the eye, and after an additional ten minutes there was found to be an entire absence of sensibility of the cornea and conjunctiva, both the ocular and bulbar portions. The following experiments were performed upon this subject, and repeated on the same subject the following day:

1. A probe was pressed into the cornea and rubbed over the surface of the cornea and bulbar and palpebral conjunctiva, without any feeling of pain.

2. The speculum was introduced and stretched to its widest extent without other discomfort than the feeling of tension at the external canthus.

3. The conjunctiva was seized with a fixation forceps, and turned in various directions with it. No pain was felt by the patient.

4. The solution caused no irritation of the eye.

5. The anæsthetic state lasted fifteen minutes.

With such facts, I at once secured some of the drug from Parke, Davis & Co., through Dr. A. B. Lyons, of the analytical department, and experimented as follows:

Experiment 1.—I began with my own eye. The solution used was two-per-cent. strength. I placed one drop in the left eye. A stinging sensation followed, lasting for a few seconds. In five minutes I introduced a second drop; this produced only the sensation of cold. The eye now felt a little stiff, but on the whole not unpleasant in any particular. In five minutes more I introduced a third drop. At the end of five additional minutes the eye was thoroughly anæsthetized. I could pinch the conjunctiva with a fixation forceps, touch the cornea and depress the same with the point of a probe, explore all parts of the conjunctiva, and insert a speculum dilated to its fullest extent, without pain. The pupil was dilated, and remained so during the rest of the day. The accommodation was not interfered with, so that both far and near vision was as good as before. There was no irritation of the eyelid or eyeball, aside from that inevitable from the handling of the eye with instruments. From this experiment I became satisfied of the anæsthetic power of cocaine, of its non-irritant properties, and of its value in dilating the pupil for ophthalmoscopic examinations. Hence, in my further experiments, I employed it for two ends, (1) as an anæsthetic of the anterior portion of the eye, and (2) as a mydriatic in cases in which it was not desired to paralyze the accommodation.

Experiment 2.—Miss L. came to me with stricture of the lachrymal canal and acute dacryo-cystitis. After obtaining the anæsthetic effect of the cocaine, I divided the inferior lachrymal canal, and passed in a probe through the entire lachrymal passage without the patient complaining of pain. The pupil was dilated as in my own case. No irritation of the eye followed.

Experiment 3.—Mr. S., aged about fifty, of very nervous temperament, came to me for relief from stricture of the lachrymal canal and dacryo-cystitis. Under the influence of the cocaine, I operated for the relief of the difficulty, and he said that he experienced but slight pain. The manner in which he behaved indicated that he reported correctly. His pupil became widely dilated, but there was no irritation of the eye. The experiments mentioned by Dr. Noyes were readily performed, with the same results as in other cases.

Experiment 4.—Mary M., a seamstress, complained of asthenopia. Under the influence of the muriate of cocaine the pupil dilated widely, so that an ophthalmological examination could be readily made. Though her eyes were very sensitive, after the anæsthesia had taken place, she said that she had no pain on the manipulating of her eye with a probe, forceps or speculum. There were no ill after-effects, no irritation. In fact, it seemed to assist the measures appropriate to the case.

Experiment 5.—Miss R., aged thirty, of nervous temperament, came to me for the removal of a pterygium. The conjunctiva was very sensitive, so that she would not permit it to be touched with the finger. After placing the eye under the influence of the muriate of cocaine, she not only would permit the cornea to be touched with the finger, but the entire growth to be peeled off the eye, and the wound united by three sutures. She said that the operation did not cause her any pain. In fact, she was astonished when told that it was completed. The pupil dilated fully as in other cases. No after-irritation.

Experiment 6.—Miss W., having episcleritis, came to me for relief. To examine the interior of the eye I employed the muriate of cocaine. The pupil dilated in about twelve minutes, so as to admit of an ophthalmoscopic examination. Meantime the pain disappeared temporarily while the eye was under the influence of the drug. The anæsthetic effect was readily gained. No irritative results followed, and the usual treatment of the case was pursued.

Experiment 7.—Mr. S. came to me for the removal of a piece of steel from the left eye. It was imbedded deeply in the cornea, and the eye was very sensitive. Placing the eye under the anæsthetic effect of cocaine, the steel was removed, the patient saying that the operation caused no pain. The pupil was

dilated as in the other cases. There were no after-irritative results.

Experiment 8.—Mr. E. L. R., having defective vision, the muriate of cocaine was dropped in the eye for the purpose of an ophthalmoscopic examination. The pupil readily dilated, and the examination was made. The anæsthetic effects were tested by speculum, forceps and probe, and were in all respects satisfactory. But a considerable inflammatory reaction followed, which lasted for three days, and then disappeared.

Experiment 9.—Mr. H. suffers from asthenopia due to over-work. The conjunctiva is very hyper-æsthetic. The use of the cocaine relieved this hyperæsthesia and all unpleasant sensations for ten hours, when they returned. No irritative effects followed. The pupil dilated as in other cases, and admitted of an ophthalmoscopic examination which was called for in the investigation of the case. The anæsthetic effect was complete for the usual period.

Experiment 10.—Mrs. H. was suffering from a large corneal ulcer. To relieve the pain cocaine muriate was dropped in the eye. Within ten minutes the pain ceased, and did not appear for several hours afterwards.

Experiment 11.—Dr. W. The muriate of cocaine was used to demonstrate its effects. The effects upon the sensibility of the cornea and conjunctiva as also upon the pupil were as observed in other cases. But there followed the next day considerable conjunctivitis. Whether this was due to his use of his eye at the microscope during the evening of the day of the experiment, or to the instrumental manipulation, is impossible to say.

Besides these cases, I have employed it to relieve the excessive pain of some cases of conjunctivitis and iritis, and in each instance, as far as could be determined in so short a time, the results to the disease proper were entirely favorable.

These experiments were all made during Oct. 17, 18, 19, 20, 21, and 22, and will be continued as occasion admits.

The *Medical Record*, Oct. 16th, contains reports of the clinical use of this drug from prominent New York ophthalmologists. We abstract the essential features of these reports.

Dr. Agnew reports three cases of strabismus convergens operated upon without pain under the anæsthetic influence of muriate of cocaine. He also reports one case in which there was a lacerated wound of the eyeball. The pain was so intense that the patient

could not permit the eye to be examined, but after the cocaine solution was employed, he could permit the most thorough examination by students without pain.

Dr. W. O. Moore reports one case in which the intense pain of a corneal ulcer was removed by the application of the cocaine solution. He also removed a pterygium, and operated upon a case of strabismus, without pain in either case.

Dr. J. L. Minor reports one operation for strabismus, and one for cataract extraction, each successfully performed without pain under the influence of cocaine. All of these cases were reported as doing well at the time the report was made.

It is not improbable that some of them will not be altogether satisfactory. But they are simply reported for what such observations are worth. Clinical experience can only finally decide upon the exact value of this drug. But the observations recorded are sufficiently unique to warrant their being placed before the profession in their incomplete shape.

At date of writing, from present data, we think the following points evident:

1. Muriate of cocaine in a two-per-cent. solution is able to allay the sensibility of the cornea so as to admit of rough manipulation of the cornea and eyelids, more severe than is called for in eye operations, without pain to the subject.

2. Without pain, eyes have been operated on for removal of pterygium, for removal of pieces of steel from the cornea, for iridectomy, for cataract, for strabismus, and for stricture of the lachrymal duct.

3. Thus far, muriate of cocaine does not seem to have exhibited any poisonous effects in the doses required. In only three cases has any irritation followed its exhibition, and in this it was by no means clear that the irritation was the result of the drug.

4. In the cases observed by myself, the pupil was dilated fully so as to admit of all the needs of an ophthalmoscopic examination. Indeed, several of the cases, as will be noted, were treated with the solution simply for the sake of dilating the pupil, in order to make such examination. The ciliary muscle does not seem to be influenced at all, so that the accommodation is not interfered with. As a result, the patient can continue with the use of his eye as before the examination. The advantage of this remedy is, that in addition to its action being confined exclusively

to the pupil, the pupil itself only remains dilated a few hours. In the cases we have observed it has lasted but ten hours at the longest, most cases a much shorter time.

5. Further observations will determine the effects of the use of this drug upon the results of operations, and upon the progress of disease, and whether it will prove a reliable mydriatic for the purposes of ophthalmoscopic examination. No doubt there is a dark side to the picture, otherwise it would not accord with all the other powerful drugs of an anæsthetic nature.

103 Cass St.

The Ætiology of Continued Fevers.*

BY F. A. SPALDING, M. D.

THE present accepted doctrine of the ætiology of continued fevers, as based upon the so-called germ theory, attributes their origin to the influence of germs or spores which, having gained entrance into the animal economy, act in and of themselves as a poison, or, as claimed by some, the germs or spores, acting only as vehicles for the conveyance of another so-called specific poison, an indefinite, infinitesimal something which chemical analysis has never yet been able to isolate, or the microscope present to us in any tangible form. It is believed by some that these germs may be developed whenever and wherever we find decomposing organic material, while others hold that they are specific in their nature, and that they are only found when transplanted. Again, it remains a mooted question how, or how far, these germs are capable of multiplication within the system, if at all. And so it happens that this so-called germ theory has been distorted in every conceivable form in order to harmonize conflicting views, or to adapt it to the existence of facts which it cannot explain.

Now after all these years of fruitless search after specific germs with only uncertain results, it may not be unprofitable to take a respite long enough to inquire whether or not our hypothesis be correct, for if our hypothesis be wrong, however far our investigations may be carried, we shall yet land wide of the mark. Let us not, in our eager zeal after the attainment and discovery of new truths, forget, meanwhile, the old, well established, first principles of our science. Now, that there are myriads of germs or spores floating in our atmosphere, no one will deny. That germs and

* Read before the Detroit Academy of Medicine.

spores are developed in infinite numbers in decomposing organic material, no one will deny. That these germs may gain entrance into the system, no one will deny. But I submit that the presence of germs or spores found in the body after death from fever, or even in the excreta during the continuance of the fever, does not prove them to be the cause of that fever, unless it can be shown that they never exist there at other times, which remains to be proven. That there do exist specific germs capable of exciting fever of a characteristic type, as in variola, scarlatina, rubeola, yellow fever, and diphtheria, I fully believe, for we have the evidence not only in the uniformity of characteristic symptomatic phenomena presented, but still greater evidence by the infection of others coming within range of the excreted virus, or by inoculation. But we have no such evidence in the case of the so-called bilious, malarial, or even typhoid fever. During the continuance of these latter fevers nothing can be plainer than that the system is wrestling with some deleterious element, but it is not necessarily a *foreign element*. What is it? To answer this question the chemist and microscopist and pathologist, with laudable zeal, have for years been searching among cesspools and sewers and marshes to find a scientific germ, forgetting, meanwhile, that there exist within the body poisons as potent as any that can be found outside of it, and their retention by a failure of elimination is followed by disastrous consequences. An old, well established first principle, but practically too often lost sight of.

Now, one of the earliest and most prominent features of a continued fever is deficient elimination. There is a defective action of the liver, of the skin, of the kidneys, of the bowels, and, in fact, of all the eliminative organs; and, indeed, if we question closely, we obtain a history indicating an inactivity of the eliminative organs for an indefinite period preceding the development of the fever, so that the patient has, as is said, been some time "getting ready" for the fever. Now, whatever may have been the cause of this defective elimination in individual cases, the result is a gradual accumulation within the system of effete material, *nature's own poison*, which, in due time, she makes desperate struggles to rid herself of.

For the purpose of illustrating my point, let us follow a case through the different periods of its history. A patient comes into your office relating his prominent symptoms

as those of languor, lassitude, and dullness, with frontal headache, anorexia, more or less nausea, and constipation or diarrhœa, which, having existed for several days, seem to be increasing. You discover the skin to be dry, the tongue coated, and perhaps a tinge of sallowness in the complexion. He ventures the suggestion that he thinks he must have "taken cold," or that he is "bilious, he feels so clogged up," a term more comprehensive than scientific, but, I believe, pointing in the right direction. There is, probably, more or less evidence of periodicity. You prescribe quinine and eliminatives for a few days, and the case is cured.

You say this man was suffering from malarial poisoning, and the quinine cured him. If I am allowed I will interpret the case as one of *deficient elimination* caused for aught I know from cold, checking the action of the skin and other organs, or from heat deranging the action of the liver, perhaps from bad hygiene and overwork reducing the nervous stimuli which control the eliminative organs. The tendency of these cases unaided by treatment is from this point onward to grow rapidly worse. Why? Not certainly because they are absorbing more and more of a so-called malarial poison, but through failure of the eliminative organs, retained excreta is accumulating, and that very rapidly. The eliminatives given act directly by meeting the prominent indication of elimination, and the quinine act as a general stimulant to the torpid organs.

But let us watch this case a little farther. We will suppose the patient had deferred coming to your office for a day or two longer. You would by that time undoubtedly be summoned to his house to find him vomiting and purging of bile and other retained excreta, sweating profusely from the relaxation and effort of vomiting, and yet the thermometer shows a very high temperature.

You say he has a "bilious attack." Now is there nothing significant about all this? Common sense will interpret this as *Nature's effort at elimination*. But eliminate what? Not an infinitesimal element, but an enormous amount of bile and every excreta of the body, which has been dammed back for the past several days, and now, under the accumulating pressure of retained excreta, Nature has forced open her escape-valves, and if the patient vomits enough, and purges enough, and sweats enough, his trouble is over, without the doctor's quinine or eliminatives. If, on the other hand, Nature is unable to thus

completely rid herself of the accumulated poison, or if, unhappily, her efforts are misinterpreted and thwarted by the doctor's drugs, the fever goes right on; it may continue steadily, or, recurring paroxysmally, is set down as a malarial intermittent, or remittent; malarial because periodical.

Let us for a moment analyze and see if we can interpret these periodical exacerbations of fever, which certainly are no anomaly in nature.

As we have seen Nature, failing or thwarted in her previous attempt at elimination, after a period of rest, makes now one herculean effort. What is the result? After being strained up to high pressure for a few hours with more or less vomiting and purging, meanwhile the patient bursts out in a torrent of perspiration, she has coerced another eliminative organ, viz., the skin, into action. The fever subsides, the patient feels immensely relieved. Why? Because he has got rid of another large amount of effete poison. After now another period of rest she repeats the effort with a like result. Can anything be more evident than that these exacerbations also are simply and entirely Nature's efforts at elimination? I think observation will fully confirm this conclusion.

It is no more strange that Nature should labor paroxysmally to free herself from a general systemic poison, than that the uterus, for instance, at the time of labor should in attempting to evacuate its contents work by paroxysmal effort. Is not this indeed the manner in which Nature always labors?

If now, Nature is unable by these efforts to completely free herself from the accumulated poison, she makes more frequent and more constant efforts until finally she does not even reserve for herself time to rest, but makes a continuous effort at elimination, and we in our ignorance call it a continued fever. Again, these fevers are self-limited, after running for one, two or three weeks with constant elimination the system is cleared and the fever terminates of itself. How would it be if, as claimed, these fevers are caused by spores or germs which are capable of indefinite multiplication—when would the fever terminate? It seems to me, I confess, that it could terminate only when the system had become so filled with poison as to destroy the patient.

If there is anything specific about decomposing organic material, how is it that we find typhoid and typho-malarial fever at places far remote from any such influences,

as among sailors, and on high table-lands, etc. I firmly believe such an atmosphere may produce fever of the type mentioned, but not, I think, by anything specific in its character. I cannot live in such an atmosphere any more than I can live in water, simply because I do not obtain enough pure oxygen to keep my blood pure, and the blood loaded is rendered unfit and unable to furnish the requisite stimulus to the nerves, and the eliminative organs, and so the torpidity of these organs very soon allows Nature to poison herself with retained excreta.

There are several other questions connected with this subject which I should like to discuss, but my purpose in the present paper is, leaving all theoretical speculations to present what by observation I am convinced is the prime essential character and fundamental principle of fevers, viz.:

1. That the phenomenon called fever is simply Nature's effort at elimination.
2. That the prominent effect of the so-called malarial and other poisons is to produce torpidity of the eliminative organs.
3. That the poisonous element is principally retained excreta.

These principles, so directly at variance with the generally-accepted doctrines of fevers, I should not have the audacity to present as anything new or theoretical, but after several years of observation with treatment based upon those principles substantiating their correctness, they have become to me conclusively proven facts.

The Use of Calomel in the Treatment of Diphtheria.

BY DR. H. A. CLELAND.*

THE following cases are given as illustrative of the use of calomel in the treatment of diphtheria.

Case No. 1.—On November 2nd, 1883, was called to see J. Butler, aged three years, a well-nourished little fellow of good constitutional inheritance. He had been ill for two days with sore-throat. On examination I found a diffused diphtheritic patch covering both tonsils and invading the anterior pillar of the soft palate on the right side, and on the left the pharynx just posterior to the posterior wall.

In six days, under the ordinary treatment of chlorate of potassa, iron and quinine, the patches had disappeared and the patient was

* Read before the Detroit Academy of Medicine.

pronounced convalescent. I did not see him again for three days. On the afternoon of the third day I was called to see the mother who was suffering from migraine. While prescribing for her I noticed a child crouping in an adjoining room. On investigation it proved to be my former patient, whom the mother said had developed the cough during the night from exposure, she being unable, through her own sickness to keep him covered. He proved to be in an advanced stage of diphtheritic croup, and in my opinion, fatally sick.

The calomel treatment was at once instituted, and for the next twelve hours he took ten grains every hour, then five grains every hour until 180 grains in all had been taken. In addition the spray of lime and the vapor of slaked lime were unremittingly persevered in. The disease, however, steadily advanced, and on the fourth day of my visit he died from apnoea. During the use of the calomel it was noticed that its ordinary effect on the bowels was not produced. After the child had taken forty grains one or two large grayish stools followed, which were consistent in character. When 100 grains had been given two or three dejections followed of the same character, but at no time during the exhibition of the remedy, did catharsis supervene.

Case 2.—John F—, aged 15, was taken with sore throat. On examination I found a diphtheritic exudate completely covering the posterior wall of pharynx, extending up upon posterior wall of soft palate and invading the right nasal fossa. He was a boy of fine physique, and of good constitutional inheritance, and has lived an active out of door life. Now he was pale and complained of great muscular weakness and difficulty of breathing. His temperature was 102, pulse 115, weak and compressible. The cervical glands were swollen and tender. His eyes were congested, the head ached intensely, in a word the general aspect of the case was far from encouraging.

He was put at once upon ten-grain doses of calomel every hour until 80 grains were taken; five-grain doses were then given until 40 grains more had been exhibited. In twenty-four hours he had taken 120 grains. During that period he had three large grayish stools, and had vomited twice a greenish fluid.

His temperature was 100°, pulse 100; skin moist, headache gone and general symptoms much improved. The exudate on examina-

tion had evidently been arrested, it was soft and pultaceous, and easily peeled off the underlying mucous membrane.

The calomel was now discontinued and the patient was put upon the bi-chloride of mercury, gr. 1-30 every three hours, together with a gargle of the same, 3 grs. to 8 oz. of water. He was also given half an ounce of whiskey in milk every three hours, together with other stimulant nutriment. The exudate for a few days would occasionally, if the remedy was intermitted for half a day, show a tendency to reform, but never acquired its pristine tenacity and would soon disappear upon resuming the remedy. On the seventh day of the attack it had entirely disappeared and the general condition of the patient, considering the severity of the case, was all that could be desired. Complete restoration took place finally, and aside from a slight deviation to the left side of the velum, from paralysis, the patient is now physically sound.

Case No. 3.—Mary L., aged eight years, a feeble scrofulous child, came under my care the third or fourth day of a diphtheritic attack.

The pharynx, including the soft palate, was covered with exudate extending up into posterior nares. The exudate was soft and pultaceous, emitting a horrible odor. She was weak, and inclined to hebetude. The action of the heart was intermittent, and syncope would occur if her head were raised from the pillow.

She was put at once upon a solution of bichloride of mercury, gr. 1-30 every hour, at the same time giving her beef juice, whiskey and milk. On the third day of my attendance the exudate had almost disappeared from the throat. She had then taken about two and a quarter grains of the drug. On the fourth day croupal symptoms suddenly developed and soon became so alarming as to threaten suffocation. Dr. G. P. Andrews was called in consultation and under his advice calomel in 4-grain doses every two hours was substituted for the bichloride. The vapor of slaked lime and oil of eucalyptus were also used thoroughly.

During the evening of the day in which this change was made she was seized with vomiting. The vomited matter was bloody pultaceous matter, smelling horribly, and was attended with great relief to her breathing. Towards morning of the following day, however, she began to sink and towards noon death took place from exhaustion.

It was noticed in this case as in the other

that during the exhibition of the bichloride no symptoms of gastric irritation made their appearance, nor did the calomel produce catharsis.

Case No. 4.—On July 17, 1884, I was called to see James B., aged five years, a strumous delicate boy of vicious constitutional inheritance. The fauces were covered with diphtheritic exudation and the posterior wall of the pharynx was partially so. He appeared exhausted and worn, pulse thready and very rapid, temperature 102° and stomach irritable. Anticipating a severe case I gave a doubtful prognosis. I preceded the treatment with ten grains of calomel every hour until the bowels were moved; 30 grains were given when this result was obtained with a visible improvement to the gastric symptoms.

A solution of bichloride of mercury containing $\frac{1}{2}$ gr. to a teaspoonful was then given in teaspoonful doses every two hours. This was continued for six days, in which time about $3\frac{1}{2}$ grains of the drug had been given. The result was beyond my anticipations. From the moment the system seemed to come under the influence of the remedy, the exudate seemed to be controlled. As the remedy was pushed, it began to soften, and finally to disappear. On the evening of the fifth day of the treatment the last shred of the exudate had disappeared, and on the sixth day convalescence was established. The boy made an excellent recovery, and has to this date never developed any ill effects from the rather heroic mercurial treatment.

During the convalescence of this patient I was called to see his sister, M. B., aged three years. She was a feeble, undeveloped little thing, and a victim to *petit mal*, which came on during early dentition. The attack was in many respects similar to her brother's, running a similar course with a like result. The quantity of bichloride exhibited in her case was about 3 grains in seven days, and no untoward effects from the drug have since developed. Her recovery was tedious, but she is now in vigorous health, with the exception of the fits, which continue as before.

In reviewing these cases, gentlemen, it is the opinion of your committee that the mercurial treatment of diphtheria has developed merits which at least should commend it to further trial, and they would respectfully call attention to the following points:

1. When large doses of either of these salts of mercury are given in diphtheria, they do not produce catharsis to any extent, or induce

any of the ordinary constitutional effects of mercury.

2. That no after unpleasant effects have been noticed to have followed the exhibition of these large doses of mercury during the convalescence, or after the complete recovery of diphtheria patients who have taken the drug in this manner.

3. That mercury exhibited in this manner has in some cases manifested an unmistakable power in controlling diphtheritic exudate, and arresting its development.

Was it a Syphilitic Freak?

BY T. C. SMITH.

SOME time ago I was treating a case that I had diagnosed as intermittent fever. He was a mechanic, about 32 years of age, of medium stature, of steady, industrious, economic habits. He was the father of three healthy looking children, yet close inspection showed that their teeth had been set on edge by sour grapes, eaten by some near ancestor. The man had, prior to the date of this present attack, been somewhat obnoxious to attacks of malarial fevers, and his residence was situated near a marshy plat of territory. For these reasons and the fact that his symptoms were clearly intermittent—having a distinct chill, followed by fever and free sweating every evening about the same hour of the day—I arrived at what I considered a certainly correct diagnosis of intermittent fever.

I gave him the usual treatment for such disease, viz., a free cathartic, followed by large doses of quinine. The chill hour was preceded by the use of strong, hot coffee, or a dose of morphia, or a full dose of whiskey. All of these failed to prevent the recurrence of the regular paroxysms, or to more than moderate the attacks. Other antiperiodics were added, and crowded to full doses, without avail. For two weeks this went on. Then occurred a little episode of interest, but of intense suffering to the patient. One night about 10 o'clock I was hastily summoned with the statement that my patient was dying, and was having excruciating pain in the head. On repairing to his bedside I found that his pain was indeed intense. He was bathed in cold, clammy sweat, chill and fever had passed off, pulse was small and feeble, extremities cold, prostration very marked. The intense head pain was in the forehead and scalp, and on the right frontal prominence was a well-defined

syphilitic node. One will never see a better specimen of such nodes than was this one. I gave him a hypodermic dose of morphia and a stimulant, from which he soon became easy, and slept some during the night. He was put on large doses of iodic. potass. the next morning. From that date he never had another paroxysm of fever or of pain, but recovered with marked promptness.

The thousand and one manifestations of hydra-headed syphilis are known to all thorough students of practical medicine. But this is a form in which it has not yet made its appearance under my hands but in this one case. Others have mentioned such periodic febrile movements as due to syphilis, and as having all the symptomatic manifestations of true malarial attacks.

Proceedings of Societies.

Detroit Academy of Medicine.

MAY 13th, 1884.

The Academy met at the office of Dr. Cleland, Dr. Bradley presiding.

WRITTEN COMMUNICATIONS.

Dr. Clark read a paper on the relation of the present diphtheria in the city to the condition of the Detroit sewers. See LANCET, June 1884, p. 529.

DISCUSSION.

Dr. Wyman : The paper read leaves little to be said. It is possible that the sewer system in a city may assist sometimes in communicating disease from one habitation to another. There have been recently cases of diphtheria which have seemed to follow the lines of certain sewers. It would seem in any event a wise precaution to provide all openings into sewers with efficient traps.

Dr. Chittick : I do not believe that sewer gas is the cause of diphtheria, but I do think that the diphtheritic poison can find its way from house to house by the avenues afforded by the sewers.

Dr. Long: We are too apt as a general thing to lay the blame of disease to sewer gas. Yet we have epidemics of diphtheria sweeping over parts of the country where there are no such things as sewers, and where the sanitary conditions would seem to be perfect. I shall be glad if in this discussion we can get at the cause of the diphtheria we have in Detroit.

The disease has been in the city several years, and seems to have come to stay. It is certain that the sewerage system in the city is not perfect, but it does not therefore follow that the sewers are accountable for the prevalence of diphtheria. The disease is much less frequent in summer than in winter. In summer the doors and windows are open ; there is opportunity for noxious emanations from the sewers or from the soil to escape. In winter these are more dangerous, because ventilation is less free. In Detroit the lateral sewers are not ventilated. Dr. J. Burdon Sanderson has shown that under the most favorable circumstances, bacteria and confervoid growths abound in the sewers. It is a common observation that in epidemics of infective diseases there are frequently points which for no discernable reason enjoy immunity from the disease. We have thus yet much to learn concerning the mode in which these diseases are communicated.

Dr. Connor : It seems to me that if there were in a town of 2,000 inhabitants one case of diphtheria, we should not say that there was an epidemic of the disease. Yet Detroit has not had a larger proportion than that of cases of diphtheria at any time this winter. I do not know of any large city where there are not always cases of diphtheria, and I do not know of any city where the proportion of such cases to the population is smaller than it is in Detroit. I can't say that I believe that the sewerage system has anything to do with diphtheria. I am inclined to think that illy-prepared food has more to do with the depraved condition of the system which favors the attack of this disease than sewer gas.

The cases on Edmund street which have been cited as showing some connection between diphtheria and the sewerage system, have occurred in such an order that to my mind they prove no such connection. I do not see how the poison could have been carried from one point to another as alleged through the sewers.

Of course our sewers admit of improvement. They can be better ventilated. Houses can be better protected from any possible escape of poisonous exhalations from them. But I cannot allow that the sanitary condition of Detroit is worse than that of other cities of the same size. It is not true, and I hope that members of the academy will not put themselves on record in such a way as to confirm the false impression that has been allowed to go abroad. Detroit, I venture to say, is as

healthy a city as there is in the United States.
Adjourned.

May 27, 1884.

The academy met at the residence of Dr. Bradley, the president occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Maxfield read an inaugural paper on a case of hepatic abscess.

Dr. Clark read a supplementary paper on the relation of sewer gas to diphtheria in Detroit.

DISCUSSION.

Dr. Gilbert: There is still room for an argument on both sides of this question. If we knew anything about the nature of the poison causing diphtheria—if there be such a poison—we should be able to reason in regard to it. The first thing is to demonstrate the existence of a poison. That established, and the nature of the *materies morbi* understood, we should be ready to inquire how the poison is spread. At present our investigations deal with a hypothetical poison, to which we may assign any hypothetical character that may fall in with our theories. It seems to me the height of folly to base upon the deductions of such reasoning a course of prophylaxis involving the expenditure of large sums of money. It does not follow that we should look with indifference on conditions which may reasonably be considered to involve danger—and certainly we should investigate with the closest scrutiny the facts of the case independently of any theories. If, as a matter of observation, we find diphtheria associated with defective plumbing, we must admit an etiological connection between the disease and its apparent cause, and we should not rest satisfied until the precise nature of that connection is established. On the other hand, we have abundant evidence that with the most faulty arrangement of the drainage system in many houses no cases of diphtheria or typhoid fever make their appearance. I have myself lived many years in a house in which there were two closets, the drains emptying into a blind sewer, and not even trapped, yet there was never a case of diphtheria in the house, and only once a case of simple sore throat.

We are in the habit of associating malarial toxæmia with low, marshy ground, yet malarial fevers occur frequently in winter when the air is dry and there is no moisture in the soil, except that in the drains and sewers.

Dr. Cleland: Some of the facts adduced by Dr. Clark may admit a different interpretation from that he has given them. Diphtheria is, as he says, a disease of cold weather. It is during the cold weather in winter that the doors and windows are kept closed, and any poison finding its way into the dwelling during that season is likely to become dangerous by accumulation, whereas in summer it escapes at once. There appears, however, to be no proof that sewer gas specifically produces diphtheria. If it does, it is certain that many who are exposed under apparently the most favorable conditions, escape.

Dr. Andrews: We are probably wide of the mark in attempting to associate diphtheria with sewer gas, or any other one thing. There are few houses in which the sanitary conditions, as we call them, are perfect. Hence, it is almost always possible to find in the condition of the plumbing, or of the sewerage, an explanation of any case of disease that may occur.

This is not the first time Detroit has suffered from the ravages of diphtheria, although the disease has never been so prevalent or so fatal here as in many other places. Twenty-two years ago cases of diphtheria were rather frequent, and they continued to be so for several years. Older physicians tell of a time preceding that, when the disease became quite prevalent. For six or eight years following this period, viz.: from 1868 to 1875, diphtheria was of rare occurrence, but of late years it has been growing gradually more frequent. These facts do not seem to favor the hypothesis that the disease has any connection with the sewerage system of the city. Diphtheria may fairly be called, however, a filth disease, and as such, all unsanitary conditions tend to favor its development. In one house we shall find typho-malarial fever springing up from a neglect of cleanliness, in another diphtheria. Similar conditions, where there are no sewers, favor the attacks of these diseases, but cannot be said to cause them. Probably damp cellars are as often to be held responsible for disease as are sewers.

It is possible that germs of an infectious disease may some times find their way from one house to another through the sewers, but such a thing probably very rarely happens.

Dr. Noyes: I should be sorry to have anything go out from this academy that might be interpreted to indicate a toleration for filth. It is true that a foul smell is not neces-

sarily associated with an unhygienic condition. In Cincinnati a doctor started a manufactory of Harlem oil in a room just under a tailor's shop. When indicted for maintaining a public nuisance, the doctor went on the stand and swore that the smell of his drugs was good for the tailor. A similar position we do not care, as a society, to maintain with reference to foul smells from the sewers. Of course it would be absurd to maintain that sewer gas is the one cause of diphtheria, for the disease prevails, as has already been remarked, where sewers are unknown. In Maine I saw cases in what would seem to be naturally the most salubrious localities—on hill-tops, with no possible source of filth poisoning.

Adjourned.

June 24, 1884.

The Academy met at the office of Dr. Andrews, Dr. Bradley presiding.

Dr. Chittick exhibited an interesting case of skin disease in a boy twelve years old. The patient was brought to him on account of severe headaches to which he is subject. These recur at intervals of four to six weeks, the attack lasting several days, and totally incapacitating him for work or study. The pain is located in and above the eyes. The pain is paroxysmal, lasting in full severity several minutes. During the attack, his mother says, the eyes seem sunk in the head, and the patient complains of diplopia. He is a bright boy at school, and rather fond of study. The skin affection has troubled him almost from infancy. It appears in the form of a scaly eruption, covering the limbs and the greater part of the body, and extending to the neck and scalp, and invading the face. The eruption appears of a dark color, as if pigmented, but this seems to be due to adhesion of dust particles to the scales. In warm weather the perspiration, which at other times is abnormally scanty, softens the scales, which then become detached and the skin resumes in part its natural condition, but as soon as cold weather sets in, the eruption reappears. The scales, under the microscope, appear to be simply epithelium.

For the headaches I have tried all the standard remedies, but none of them afforded any permanent relief. Menthol has a good effect, also chloroform.

In the mornings the patient has spells of coughing, which end with vomiting.

Dr. Carstens: I cannot suggest any treatment for the skin affection except of a tenta-

tive character. Alkalies might be useful, but possibly acids might be equally so. Local application of citrine ointment might be beneficial. Is there any history of specific taint?

Dr. Chittick: No.

Dr. Carstens: It might be a good case for *berberis aquifolium*. The headache seems to be a neuralgia of the supra-orbital nerve.

Dr. Robertson: I have seen one case similar to this one. It was before I was a medical student, but the appearance of the eruption, and the history of the case was very much like that of this patient.

There is probably a scrofulous taint in this case. I should try the effect of a thorough soaking of the surface, and should apply oil (*petrolatum*) liberally. There is evidently a superabundant proliferation of epithelium.

Dr. Wyman: I have had one case somewhat similar to this. The patient had been troubled from the time he was three years old. There was a peculiar toughness of the skin, as if it were filled with some waxy substance. I applied soap and warm water, and scraped down to the sound skin. In the subsequent treatment I made a free use of soap, as I believe with benefit, although I also employed arsenic. The black color in that instance was certainly due to the entanglement of dirt in the roughened cuticle. Probably there is in these cases a deranged secretion of the skin.

Dr. Connor: Duhring says these patients do not get well. The scales may be removed, but they will return. He recommends oil. I should like to ask Dr. Robertson how he thinks oil will act in such cases?

Dr. Robertson: I think the oil improves the local nutrition, although I can not tell in what precise way. Dr. Newman, in Vienna, treats cases similar to this with cod-liver oil. In one case of skin disease in a child, which I call to mind, the patient had been brought up on granum. It craved butter, and I advised that it be allowed to have it; I also used oil, and the eruption improved.

Dr. Andrews: The case to me is a unique one. The authorities say that treatment is very unsatisfactory.

Dr. Yemans: I should call the case one of *Ichthyosis*, and should expect no benefit from treatment. I think the effect of soap will be only temporary. It seems to me that there is pigment present, although of that I cannot be certain without a more thorough examination by daylight. There may possibly be a *chromidrosis*.

There is a patient at Bay City—a boy—who

has been under my treatment for five years. The eruption disappears in summer, but returns in winter. I do not think that any internal treatment will benefit. There have been two or three cases in the city that have come under my observation.

WRITTEN COMMUNICATIONS.

Dr. Geo. Duffield read a paper on Microscopical Changes in the Kidneys in Bright's Disease.

DISCUSSION.

Dr. Wyman: There is something more in Bright's disease than merely an albuminous condition of the urine. Indeed, albumen is not always present. I have had cases in which I did not detect it in any stage of the disease. There is, however, a group of associated symptoms which generally characterize the disease. As the disease progresses there is a hypertrophied condition of the heart. The pulse is changed, and anasarca develops. Finally there are structural changes in the kidney, which, even if they produce only obscure symptoms during life, are unmistakable after death.

I have often produced albuminuria in animals by interfering with the circulation. Subsequent examination of the kidneys showed no appreciable organic changes. If one kidney alone were treated in this way, I do not think the phenomena of Bright's disease would follow.

Dr. Connor: The connection of the microscopical appearances in this disease with the clinical phenomena is not clearly made out. The study of the microscopical lesions, however, is interesting, and is likely to prove helpful.

Dr. Andrews: There are no symptoms or appearances pathognomonic of Bright's disease. If a certain variety of cast is found, we may learn the existing condition, but often we fail to find the casts, although the condition exists. I have been interested lately in a case of post partum albuminuria. The labor was not a severe one, although the forceps were used. There was a little elevation of temperature following it, but no fever. The patient got up on the tenth day. About a month after confinement, erysipelas set in, and in about a week the feet began to swell. I found the urine abundantly albuminous. There was considerable anasarca, and the patient suffered much from dyspnoea; no casts were found from first to last, nor any blood. The urine is still a little albuminous, and of low

specific gravity (1.010). I have made repeated examinations of the urine during the three months the case has been under observation, but have not found a single cast.

The case is not unique in my experience, in this respect.

EXHIBITION OF APPARATUS, ETC.

Dr. Lyons exhibited a new uræometer of simple construction, by the aid of which the amount of urea in a specimen of urine can be determined in a few minutes, without any troublesome calculations. He also showed the Academy a convenient pocket case for bedside urinary analysis, manufactured by Parke, Davis & Co.

Adjourned.

July 8, 1884.

The Academy met at the office of Dr. Connor. In the absence of the president and vice-president, Dr. Noyes was called upon to occupy the chair.

WRITTEN COMMUNICATIONS.

Dr. Chittick read a paper entitled, Relation of Ordinary Sore Throat to Diphtheria, advocating the view that lesions of the mucous membrane in cases which at first are non-specific in character, afford an opportunity for diphtheritic infection. The disease is thus primarily local, although constitutional symptoms may appear before the formation of the characteristic membrane.

DISCUSSION.

Dr. Andrews: I think the views presented in the paper offer the most rational theory of the pathology of diphtheria. I do not think the germ theory of the origin of the disease is established. As regards the distinction of false membrane in croup, diphtheria, etc., I believe that the clinical evidence is clear that that of diphtheria involves an element of infectiousness which is absent in croup. The false membranes may be identical in physical, chemical, and microscopical character, but the pathological condition of the mucous membrane producing them is clearly distinct.

It is not uncommon to see diphtheritic symptoms appear in a patient attacked at first with a simple tonsillitis, or pharyngitis. I attended such a case not long ago. For three days there was no evidence of anything beyond a simple sore throat, but diphtheritic membrane then made its appearance, and the characteristic constitutional symptoms devel-

oped. It seems as though the diphtheritic poison exists in a dilute form in the air, but that only the most susceptible are affected by it, unless there be first some lesion of the mucous membrane, giving it a favorable nidus for development.

Dr. Gilbert: We are apt to confound diseases with our knowledge or conception of them. In some points my experience does not coincide with that of the writer of the paper. In diphtheria there are certain prodromata—fever, swelling of the glands, etc., before any membrane forms. Yet in some cases the throat trouble certainly assumes prominence very early in the disease. Fortunately it is not necessary to make a diagnosis with certainty before instituting treatment. It is my practice to assume, in all doubtful cases that the disease may be diphtheria, and to treat the patient accordingly. The treatment may not be the very best that could be adopted if it is not diphtheria, but it is a fairly good treatment. In our choice of remedies, here as elsewhere, we are sometimes offered alternatives that seem irreconcilably opposed to one another, and yet both courses may tend to the same result. Quinine and iodine are agents widely unlike in their physiological action, and quite opposed to one another in their pathological tendencies, yet we select sometimes one and sometimes the other to combat malarial poisoning.

Dr. Connor: I have for a good while been of the opinion that the influence of the epithelium has not been sufficiently considered as a factor in the causation of disease. We know that epithelial cells are charged with the most important functions of secretion, absorption and elimination. It is easy to see what grave consequences may follow any interference with these functions. The mucous membrane, while intact, offers effectual resistance to the entrance of poisons, which, if injected into the blood or the cellular tissue, produce at once their characteristic effects. In this climate the mucous membrane of the throat and nares is frequently irritated; exposure to sudden changes of temperature causes death of proto-plasmic matter, and there is thus not only suspension of function, but actual solution of continuity in the membrane, giving opportunity for the absorption of morbid agents. Attacks of indigestion are accompanied by suspension of function in the epithelial structures. The use of ice-water, of alcoholic drinks, and of hot foods are among the causes which, among us, lead to lesions of the mucous membrane,

and the prophylaxis against disease involves an avoidance of all these and similar causes.

The inflammatory process is of course essentially the same, whether caused by mechanical irritants, by chemical agents, or by organic poisons, and so there may be similar pathological phenomena presented in cases where the essential nature of the diseases is widely different.

Dr. Noyes: My idea has been that in cases of diphtheria the throat symptoms are preceded by and subsidiary to constitutional symptoms, which are more or less distinctly manifested, but which in my experience have constituted the characteristic feature of the disease.

Trousseau warned against the use of blisters in diphtheria, because any abrasion of the skin becomes the seat of diphtheritic deposit and presumably a center of infection.

Dr. Connor exhibited an eye removed on account of loss of sight caused by entrance of a particle of steel into the eye. The man was hammering on an anvil when a fragment of metal flew off and lodged in the eye. His physician, homœopathic, told him that he thought the iron had not entered the eye, and the man continued two days at his work—in charge of a mill in Bay City. He then went to another physician who told him that there was a foreign body in the eye. When he consulted me there was no pain in the eye, but the sight was lost, and I advised removal of the organ and a few days later made the operation. The fragment of iron was embedded in the ciliary body—so minute as to be hardly discernable by the unaided eye.

Adjourned.

JULY 22, 1884.

The Academy met at the office of Dr. Andrews, Dr. Bradley occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Duffield read a paper on the urinary casts found in different forms and stages of Bright's disease.

DISCUSSION.

Dr. Andrews: The subject of Bright's disease has always been one of great interest to me, my attention having been turned to it in my student days. There have been great changes in the views of the profession in regard to the pathology of Bright's disease, and to the significance of the several signs and

symptoms that characterize it. Every branch of physical diagnosis passes through certain stages of evolution. Certain signs are first pointed out as pathognomonic of certain diseases. Further study shows that the earlier generalizations have been too hastily made. The signs accompany certain physical conditions which may, however, differ widely in their pathological origin.

Thus the presence of albumen in urine was long ago pointed out as indicative of disease of the kidneys, and for a long time the terms albuminuria and Bright's disease of the kidneys were regarded as synonymous. Little by little, with a better knowledge of physiology, we have learned in part the real relation of albuminuria to kidney diseases, although there are many things we understand only imperfectly in regard to this particular symptom. We were taught at one time that each particular variety of cast had its peculiar pathognomonic significance. The amyloid cast indicated, for example, waxy degeneration of the kidney. But we now know that this form of cast may appear in parenchymatous nephritis. So, too, the granular cast that was supposed to indicate certainly parenchymatous disease, we find to occur in simple hyperæmia of the kidney. In the same way we were formerly taught that the different varieties of cancer might be discriminated by the characteristic cell forms found in each, but wider observation has shown that the cancer cells have not the specific characters that were assigned to them. The same thing has been illustrated again in the history of physical diagnosis of thoracic diseases, but further illustrations are superfluous.

We are learning that signs and symptoms have significance only when they give us an insight into pathological conditions lying behind them.

When I was a student we were taught that there was no room for any favorable prognosis in a case of Bright's disease in which fatty or waxy casts were found. Now we are told that there is no form of renal disease which is not sometimes cured, and many of us have seen cases in which our patients have refused to verify our unfavorable prognosis—and, if they have not actually recovered have lived many years free from discomfort, and succumbed at last to some other disease. One man to whom I had allowed not more than two years, lived five instead. The post mortem examination showed that the disease had been interstitial, although the

symptoms and the history of the case had pointed rather to an acute tubal nephritis. The kidneys were greatly contracted, weighing hardly an ounce each.

In some cases casts are never found. The symptoms produced by kidney disease may indeed wholly elude observation. It is probable that the majority of cases of simple congestion of the kidneys pass unnoticed.

Dr. Clark: I have had within the last three months a case which, according to the books, should have died, but for some reason she has recovered. I thought it a typical case of Bright's disease. There is present in the urine in this disease albumen, but this occurs also in acute zymotic diseases, in pneumonia, in scarlet fever, in pyæmia—where the kidneys are only secondarily affected. If we accept the mechanical theory, I do not see why casts may not also be found under the same conditions.

In the case alluded to above albumen was present in great abundance—the coagulum occupying two-thirds the bulk of the urine. Hyaline casts were found, and fat globules. My diagnosis was confirmed by counsel, but the woman recovered in spite of disease and treatment.

Dr. Connor exhibited an eye removed from a patient having the following history: The patient was a girl about 10 years of age, from Saginaw. About ten days before I saw her she had been playing in the barn, and came in complaining that she had got something in her eye. The eye was a little red, but there seemed to be no foreign body in it. Cold water was applied, and other domestic remedies. Inflammation developed in a few days resulting in sloughing of the cornea, and this was the condition when I first saw it. I suppose some bit of straw had lodged in the eye giving rise to the formation of an abscess, and the treatment was just such as would promote sloughing. Corneal ulceration will not bear cold applications or poultices.

PREVAILING DISEASES.

Dr. Andrews: The most prevalent thing I have seen is a form of neuralgia, beginning with myalgia of the lumbar muscles, and developing into sciatic or crural neuralgia.

Dr. Clark: I have found diarrhœa and cholera morbus unusually prevalent. One case particularly presented some features of interest. The patient was a young boy, employed as a cash boy. Last Monday he was taken with vomiting and diarrhœa. The matters vomited were black, as were also the

dejecta. Vomiting persisted day after day, being provoked by anything taken into the stomach, even water. There was much cyanosis, extending to the limbs and body. Saturday afternoon he died, rather suddenly, remedies having afforded only temporary relief. The persistent vomiting of tarry, black matter, the coldness, the thirst, and the cyanosis were the unusual features of the case.

Dr. Cleland: I have seen a good deal of diarrhoea in adults and children. Have seen but one case of true cholera infantum; patient died in four hours.

A few weeks ago I had a case of meningeal rheumatism. The temperature, which had been 100° to 101° suddenly rose to 103° and 104° and continued to go up until it reached 110°. These cases of metastasis are characterized always by a very high temperature, and are always fatal. The patient in this case lived only 8 or 10 hours.

Dr. Jenks: At my home in the country one of my neighbors said his wife had a swelling in the neck. The next day several members of the family were affected in a similar manner. The swellings were purely glandular, and did not proceed to suppuration. They seemed to have a malarial origin, and a number of cases were reported in the neighborhood, mostly in children.

Dr. Bradley: There has been some scarlet fever in Hamtramck. In one family four children had it in succession, the youngest was attacked last, and lived only two days. This child has been unfortunate from its birth. It was an infant at the time of the fires in Huron county, and the family was compelled to take refuge in the lake to escape death by burning. It has been subject to catarrhal attacks, and in the fatal illness, catarrhal symptoms were prominent.

Dr. Connor: I have seen within the past six weeks a number of cases of eye trouble—scleritis, iritis, conjunctivitis, etc.—in persons otherwise apparently in good health, but which did not improve until put thoroughly under the influence of anti-periodics. One case was one of serpentine ulcer of the cornea, which showed no improvement until quinine was exhibited.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

JUDSON BRADLEY, M. D.,
President.

American Public Health Association.

The late meeting of this body, at St. Louis, was generally satisfactory. From the accounts as published, we take the following abstracts of such papers as have a general interest to the medical profession.

TENEMENT REFORM.

The first paper was on the squalid dwellings of the poor, and was contributed by Dr. Chas. W. Chancellor, secretary of the State Board of health, of Maryland. He said the question had a most important bearing upon the public health. It was most important that the public should know the existing state of things and apprehend the hazard and risk which was involved by their continuance. If an investigation could be made of the unsanitary condition of the dwellings of the poor in the large cities of America, it would reveal a frightful picture of vice and misery. Little had been done to improve their condition. It was well known that the lower classes were much given to intemperance. There was no real reason for that, unless it was that the sense of their misery superinduced the diseased craving for stimulants. It would be well if social reformers would regard intemperance from that point of view, as it was quite certain that the misery and squalor of the poor was largely the cause of intemperance amongst them. The great industrial classes of the country were entitled to protection, both as regarded their health and their avocation. Therefore it was necessary that there should be vigorously administered laws for the protection of the health of every citizen, and especially over the health of the industrial population should every safeguard be placed. A nation such as this, with 55,000,000 of people and vast manufacturing, industrial and agricultural interests, should protect the health of its citizens most adequately, as disease paralyzed labor and wasted capital. It should be the primary object of every intelligent government to prevent disease and preserve the health and lives of its citizens, and to maintain its whole people in a condition of the highest efficiency for the labors of peace and the struggles of war. Though social reform was in the air, never before was the misery of the poor more intense and their conditions of life more hopeless than at the present time. The courts and alleys of our crowded cities presented spectacles of squalor which were a disgrace to civilization, and which ought to arouse the public to the need for a reform.

HEROIC MEASURES.

As to the means for remedying the evil, Mr. Joseph Chamberlain, a member of the English cabinet, went to the root of the matter, and spoke out with uncompromising plainness when he said that the authorities should proceed on the assumption that houses which were unfit for habitation should be declared public nuisances, and the authorities empowered to compel the owners to put them in proper condition, or require them to be closed or demolished. It was certain that much more was capable of being done than had yet been undertaken. The owners of miserable dens which existed in many cities should be compelled to put them in good sanitary condition. Overcrowding should be strictly prohibited under a heavy penalty, and houses used for crime at once closed and the re-establishment of similar houses elsewhere in the cities prevented by the due enforcement of proper regulations. To that purpose the municipal authority ought to have the hearty co-operation and consistent support of public opinion. When it was necessary to purchase unsanitary houses to effect public improvements, the authorities should be compelled to pay only a price commensurate with the letting value of the property for legitimate purposes, and not the added value in consequence of the owners wink at the use of their property for illegal and immoral purposes, or the consequence of their property being overcrowded and let to more persons than it was capable of properly accommodating. In conclusion, Dr. Chancellor urged that local authorities should be clothed with powers enabling them to successfully grapple with the evils of overcrowding and the evils arising from the occupation of unsanitary dwellings.

HOUSEHOLD REFUSE.

Maj. Samuel A. Robinson, inspector of plumbing of the District of Columbia, followed with a paper on "The Hygiene of the Habitations of the Poor." It was full of practical suggestions with regard to the building of dwellings, and particularly with regard to their drainage and ventilation. To begin with, he urged that municipalities should have the power to prohibit the erection of a dwelling house on a damp site until it had been thoroughly drained and a course of cement laid to prevent the rise of ground air. The authorities should insist that all water closets had flushing tanks and efficient flushing traps. All fixtures having connections

with the drains should be exposed, and water closets and sinks should not be boxed in. Cast iron and other ware should be abandoned in favor of delf wares, and, in every case the simplest and least complicated systems of closets should be used. The simplest were always the most reliable. Ashes and refuse of all kinds should be removed by one contractor where it was possible, as the most stringent regulations could then be enforced as to their frequent and prompt removal. In tenement dwellings attention should be most carefully given to ventilation and light, to the isolation of the families, to the water closet and the water supply, and, as far as possible, the use of deleterious wall-paper should be prevented. It was the duty of every municipality to exercise as much care continuously with regard to the sanitary condition of the town as though cholera or yellow fever were actually in their midst and carrying off their victims daily. He alluded to the success attending the erection of Peabody and other model dwellings in London, and said as a result of the regard to sanitary conditions which had been observed in the erection of those buildings, the mortality amongst the occupants of them was lower than the rate of mortality in London generally, and lower than among the residents in the houses in the better parts of that great city. There has not been a single case of typhus fever among the adults living in the model dwellings. That showed the importance of every attention being paid to sanitary matters, and until the sanitary condition of the poor was improved he asserted that the work of the clergyman and the work of the schoolmaster would all be in vain.

The next paper was on "The Sanitary Survey of a House." It was contributed by Dr. Wm. K. Newton, health officer of the City of Paterson, N. J., and consisted of a number of suggestions to be acted on by sanitary officers in inspecting and keeping a record of the sanitary condition and sanitary history of a dwelling house.

LICENSED PLUMBERS.

A discussion on the paper was opened by Dr. Hunt, of New Jersey, and continued by Mr. E. Brooks, of New York, Dr. Read, of Ohio, Dr. Fee, of Kansas City, Dr. Bell, of New York, Dr. Raymond, of Brooklyn, Dr. Briggs, of St. Louis, Dr. G. Devron, of New Orleans, Dr. Bryce, of Toronto, and Dr. Cook, of Nashville, Tenn. In the main the discussion was with regard to the de-

tails of sanitary work. Mr. Brooks, however, introduced the question of the licensing of plumbers. He said in the State New York the legislature adopted a bill three or four years ago, compelling plumbers to hold licenses. The bill when introduced was strenuously opposed by the plumbers, but now that it had been in force a few years the plumbers themselves were in favor of it, as they held that it kept incompetent men out of the business. Mr. Brooks urged that it was as important that plumbers should hold licenses as to their competency, as it was that doctors should hold diplomas.

Dr. Briggs, in alluding to the sanitary condition of St. Louis, which had been incidentally remarked on by one of the speakers, said there was a great difference between St. Louis of 1884 and St. Louis of 1849. The sanitary condition of St. Louis at the present time was as good as that of almost any other city in the country. He would not like to say anything calculated to stop local sanitary work, but he claimed that St. Louis had as many sanitary advantages as any other American city.

THE AVERAGE LIFE-TIME.

The reading of papers was renewed at the close of the discussion. The first of the second series was by Prof. George H. Rohe, of Baltimore, on "The Hygiene of Occupations." He prefaced his remarks by alluding to the paucity of literature and statistics with reference to the subject, and then proceeded to deal with the statistics on the subject prepared at the instance of the Massachusetts Legislature, which covered the 31 years and 8 months between May 1, 1843, and December 31, 1874. The total number of deaths during that period was 144,954, and the average age of each individual 50.9 years. The list was divided into ten classes, and showed that of the total number of deaths 21,832 were cultivators of the soil, with an average age of 65.29 years; active mechanics abroad, 10,093, with an average age of 56.17; active merchants in shops, 16,576, with an average age of 47.57; less active mechanics in shops, 17,233, with an average age of 43.87; laborers, 28,059, with an average life of 47.41; men employed on the ocean, 8,044, average age 46.44; merchants, financiers and agents, 15,965, with an average of 48.95 years; professional men, 5,175, with an average length of life of 50.81, and females, 3,343, with an average age of 39.17 years. These figures showed that cultivators of the soil and brain workers

had a good expectation for long life. Dealing with the various occupations and their influence on the health of those engaged in them, he said those engaged in the manufacture of chlorinated lime were subject to chronic chlorine poisoning. Persons engaged in the vulcanization of India rubber were very much troubled with pneumonia, and had a predisposition to rapidly succumb to consumption. Lead-workers suffered from lead-poisoning, and painters were especially liable to the same disease. Mirror-makers, fulminate-makers, hatters and others inhaling dust were liable to consumption, and brass-workers to a peculiar disease termed brass founders' ague.

AMERICANS LONG-LIVED.

Stone-cutters in Germany live to the average age of 36 3-100 years, but the figures showed that in this country the average length of life was 40 90-100 years. Rag and wool-sorters were liable to a peculiar disease, which was probably anthrax. The average life of millers, according to Hirt, was 45 1-10, but according to the Massachusetts figures, 57 14-100. Workmen in grain elevators suffered from catarrh, and brush-makers were peculiarly liable to phthisis. Firemen on steamers suffered from pulmonary diseases and from heart disease. Statistics showed that brain-workers had a higher expectation of life than any other class of men. In conclusion, Prof. Rohe suggested that the association should appoint a committee to consider the question of the effects on health of the various avocations, and that each member should give the result of his researches at their annual meetings.

Dr. Alt, of St. Louis, read a paper on "Protective Spectacles for Workingmen." He adverted to the dangers to the eyesight which attended work in foundries and stone yards and other places in which hard chips are constantly flying about, and to the loss of the sight of both eyes in consequence of sympathetic ophthalmia arising from injury to one eye. The all-important object he contended was to protect the eye and prevent accidents. For that purpose he recommended that workmen who were exposed to danger from flying chips should wear protective spectacles while at work. Workmen declined to wear such spectacles, some from ignorance and some from vanity. He recommended that employers should be made pecuniarily liable for accidents to men in their employ, and the outcome of such a measure would be that

employers would provide protective spectacles and compel men to wear them. If the Conference could only be the means of some action being taken in that matter, it would have accomplished much good and earned the thanks of many families.

HEATING AND VENTILATION.

Prof. Charles O. Curtman, of the Missouri Medical College, next read a paper on "Heating and Ventilation." He instanced the advantages of the various systems of heating and ventilating public rooms, and recommended the hot air principle as the one best adapted for public buildings.

The last paper was by Surgeon W. Thornton Aarker, of the United States army, Fort Union, N. M., on "The Sanitary Management of Railway Cars and Stations." He enlarged on the dangers attending the removal of sick and convalescent persons by railway in the ordinary cars, and contending that the evil was one calling for immediate legislation. Each railway company should have hospital cars, and at important depots like those of New York, Chicago and St. Louis there should be an organized system of inspection. He also called attention to the present system of railway car privies, and insisted that a radical change was imperatively necessary.

Annual Address Read Before the Wayne County Medical Society, Oct. 9th, 1884.

Gentlemen of the Wayne County Medical Society:

As the retiring president of this society, it becomes my duty to return to you my sincere thanks for the honor you have conferred upon me as your presiding officer for the past year, and to recognize the kindly manner by which you have sustained me.

It is a pleasing retrospect to know that since the organization of this association all the meetings have been conducted in harmony and the relations of its members, pleasant in the beginning, have continued to be so.

It seems to me proper and an incumbent duty to give you an abstract of the society's doings for the past year, and to make such suggestions for its interests as have occurred to me during my term of office.

The Wayne County Medical Society was organized eight years ago and has held its meetings regularly as provided by its by-laws, seven years of which time have you honored me with the presidency.

Its membership, I am proud to say, embraces most of the leading members of the medical profession in the city of Detroit and County of Wayne. It has in a great measure fulfilled the object of its incorporation, and has by its published proceedings given to the members of the profession outside of its own membership much valuable information.

For information after the status of the society I respectfully refer you to the reports of the secretary and treasurer, which I believe will be eminently satisfactory. One point I can congratulate you upon is the fact that the society has no indebtedness.

Referring to the fact that it is the duty of the retiring president to give an outline of the work for the future, and to make such suggestions as will enhance its interests.

The first importance to the success of a medical society is the prompt and continual attendance of its members. It is a fundamental necessity, and is the exponent of the interest each individual has in its success.

The great question is the personal interest. If the member has none his seat will be vacant and the slightest excuse will satisfy him for his absences. Societies are formed for both a general and special interest, wherein each member is expected to aid in its success, and furnish his quota, whether it be by oral information or written, as the case may be. Every member should give, and every member, as a sequence, will receive.

This is apparent in medical societies, indeed more so than in almost any other. The reports of cases seen in practice, in which are related special departure from their ordinary courses; such as abnormal conditions of arteries, veins, nerves and muscles, and their distribution, as revealed by dissection, and in operations by the surgeon; peculiarities seen in fractures, and dislocations and the means adopted for their reduction and treatment, and other abnormal conditions that come before the surgeon's observations; how diseases affect different individuals in the same climate and in the same season, and under similar circumstances; the effect of remedies in a given disease, why successful in the hands of one, and worse than useless in the hands of another; why they lose their credit one year and recuperate it in the next; how and when to assist nature in difficulty; cases of obstetrics by mechanical, surgical or other means; the aids to diagnosis by mechanical means; chemistry and the microscope; these and others too numer-

ous to mention, are the benefits to be derived from associated intercourse.

A well conducted medical society is practically a medical school, where all are teachers and all are scholars. There is always something to be learned by some one. Even the elder member may gain some information from his younger brother, and the junior cannot fail in learning from the detailed experience of his senior.

Written papers have a double value. 1st. By inculcating the habit of making notes of interesting cases, involving the necessity of research and investigation. It often happens that we think we have discovered something new when in fact the knowledge has lain dormant in the brain, and the occasion has developed it. Hence to be a good writer requires that he be also a good reader. It cannot always be expected that the orator can present a written view of a subject that is entirely new, but he can give his personal experience and observations as they are manifested to him.

2d. The discussion arising therefrom may serve to confirm him in the opinion expressed, or demonstrate that they are unstable, and have no foundation in fact. It is a common observation amongst the laity that no profession is so much at home in the expression of their opinion as the medical profession, when called upon on public occasions to speak. This arises from the habit of discussion in these societies, which begets a confidence that otherwise cannot be obtained, for as a rule he has acquired the habit of studying his subject, and knows whereof he speaks.

For the proper development of this accomplishment it seems to me it would be for the interest of all that a committee should be appointed by the president monthly, whose duty it should be to select the subject for discussion and that he should designate the member to present the same to the society in writing, at the second meeting following. No excuses should be allowed, and the person appointed should feel that he has been honored by the duties imposed upon him.

Every member should feel an obligation resting upon him to investigate the subject and make a personal effort to be present. As before stated no speaker can address bare walls with any interest, and no writer can do justice to himself or to his subject when he has the idea that he will have no listeners.

Another benefit to be derived from our medical association to medical men is the better knowledge members have of one another with whom they are associated. Of all the professions the members of which in a given locality know so little of one another, the medical profession stands at the head. Was it not for the institution of societies they could scarcely know one another except by name. Their adoption of the motto on the Scottish seal would certainly prevent them from any acquaintances.

This leads one to ask your careful consideration of the question: Why should not the medical profession of our city be a unit? Considering it from an experience of over 35 years it seems to me there is no valid reason why it should not. Laying aside individual objections to individuals a common interest should unite all as one.

I refer to this subject from the fact that a union of the medical societies in this city and county would be a matter of practical and personal interest to all. Looking at the question in its broad light and laying aside all personal feeling, I can see no reason why a union should not be accomplished.

Going still farther, the day is not far distant when the American Medical Association, on account of its size and consequent unwieldiness, its membership will be limited to delegates from State medical societies, and State medical organizations to be made up of delegates from county medical societies.

In view of the fact that our own state medical society has appointed a committee to report at the next meeting on the question of its re-organization, whereby it can be made a strictly delegate body; should this result be accomplished and the county society be represented by the number of its members, how essential it would be that the metropolitan county of the state should demonstrate her power by the number and intelligence of her membership.

There is another subject to which I would respectfully call your attention, concerning which low murmurings have been heard from the profession not only abroad but at home. I refer to the amount of gratuitous medical and surgical service given to hospitals and other institutions by medical men.

It is a fact beyond denial that all others giving service to such institutions are paid, and liberally paid, but the medical and surgical staff are excepted.

It is also well known that these so-called

charitable institutions do not (with rare exception) receive within their doors only such as can pay or are being paid for.

What would these institutions amount to deprived of medical advice and medical service?

It matters not whether it be obtained from the regular profession, homœopath or eclectic, the principle applies.

At a very low estimate \$20,000 worth of service is annually given St. Mary's and Harper's hospitals alone. Other charitable institutions will swell the amount to \$30,000. This is for medical service alone, and does not include surgical operations and special medical and surgical advice.

Even when paid for as in the cases of the insane asylums of the state the remuneration is trifling compared with the service given. In the Michigan Asylum for the Insane at Kalamazoo there are five medical officers whose aggregate annual pay is \$7,300, board and lodging included. For this they treated for 1884 265,702 for one day, or in other words there were 892 patients; the number of weeks these patients passed in the asylum was 39,386, multiplied by seven gives 265,702, number of days they received medical treatment. Allowing only 50 cents a visit to each patient the total for service would be \$132,851.

The eastern Michigan asylum, at Pontiac, has also a staff of five physicians, at a total salary of \$6,825.00 per annum, with lodgings and board included. 228,455 days of treatment were given to patients, which, at 50 cents a visit, would amount to \$114,227.50. The pay of the staff of these institutions by the rich State of Michigan is simply ridiculous. The same principle will also apply to similar institutions in other states.

But the profession of medicine is a charitable one, say the public. Hence, they should heal the sick and wounded for charity's sake.

Does the lawyer, the merchant or the mechanic work for charity's sake? Is it any wonder that one-third of the profession cannot and do not pay their expenses? One-third barely support themselves, while the other third, by dint of economy and fortunate circumstances, may manage to secure a competence for a rainy day.

We think all medical service should be paid for, whether given to individuals or corporate institutions.

In the Sandwich Islands, in the city of Honolulu, the medical staff who do service in

the hospital are liberally paid. A bright example to other nations and cities. When everybody regains pay for their labor, the doctor should not be made the exception. A cogent reason is given that the honor of being on a hospital staff is sufficient remuneration. Were these staffs selected on the principle of the *concours*, there might be some show for honor, but where they are appointed by reason of the influence they can bring, the honor is rather empty. We believe the day is not far distant when the principle of tradesmen will apply to physicians as well as to other modes of employment.

It is gratifying for me to report to you that death has not entered our ranks, and but few or any have suffered personally from disease. Mentally and physically we are as when we entered upon the past year. May such a blessing attend us upon a succeeding annual gathering.

I cannot let this occasion pass without expressing my thanks to Dr. Rouse, as secretary, whose attendance has scarcely ever failed, and who has kept the records and prepared the minutes for publication since the society's organization. To all the officers for their uniform kindness, and to each member for the courteous manner you have sustained me as your presiding officer. I have only one request, that you will transfer the same pleasant relations to my successor in office.

WM. BRODIE.

Health in Michigan.

For the week ending September 20, 1884, the reports indicated that dysentery, erysipelas, typho-malarial fever and scarlet fever increased, and that remittent fever, and cholera morbus decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending September 20, were south-west; and, compared with preceding week, the temperature was considerably lower, the absolute humidity considerably less, the relative humidity and night ozone less, and the day ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending September 30, and since, at seven places, namely, Detroit, Handy, Hastings, Ionia, Kalamazoo, Prairie Ronde, and Wyandotte; scarlet fever at eleven places, Detroit, Dorr, Fairfield, Grand Rapids, Ionia, Jerome, Kalamazoo, Monroe, Muskegon, Muir, and St. Johns; measles at Detroit.

For the week ending September 27, 1884, the reports indicate that remittent fever, neuralgia, cholera morbus, bronchitis, inflammation of the bowels, diphtheria, and consumption increased, and that cholera infantum and typhoid fever decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending September 27, were south-west; and, compared with the preceding week, the temperature was higher, the relative humidity was considerably more, and the absolute humidity and the day and the night ozone more.

Compared with the average for the month of September in the six years, 1879 to 1884, intermittent fever, typho-malarial fever, diphtheria, pneumonia, and remittent fever were less prevalent in September 1884. There was no marked increase in the prevalence of any disease reported in the month of September, 1884.

For the month of September, 1884, compared with the average of corresponding months for the six years, 1879 to 1884, the temperature was higher, the absolute humidity was more, and the relative humidity and the day and the night ozone lower.

Including reports by regular observers and others, diphtheria was reported present during the week ending September 27, and since, at twelve places, namely, Detroit, Douglas, Edmore, Handy, Ithaca, Kalamazoo, Mendon, Muskegon, Port Huron, Sand Lake, South Haven, and Wyandotte; scarlet fever at six places, Detroit, Fairfield, Grand Rapids, Kalamazoo, Muskegon and Wexford; measles at Detroit and Whitehall.

For the month of September, 1884, the reports indicate that typho-malarial fever and typhoid fever increased, and that cholera morbus, cholera infantum, diarrhoea, and dysentery decreased in prevalence, compared with August, 1884.

Compared with the average for the month of September, in the six years, 1879 to 1884, intermittent fever, typho-malarial fever, diphtheria, pneumonia, and remittent fever, were less prevalent in September, 1884. There was no marked increase in the prevalence of any disease reported in the month of September, 1884, compared with the average of that month.

For the month of September, 1884, compared with the average of corresponding months for the six years, 1879 to 1884, the temperature was higher, the absolute humid-

ity was more, and the relative humidity and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of September, 1884, at twenty-five places, namely, Armada, Bloomfield, Detroit, Douglas, East Saginaw, Edmore, Fowlerville, Flint, Grand Rapids, Hastings, Handy, Ionia, Ishpeming, Ithaca, Kalamazoo, Marquette, Mendon, Muskegon, Port Huron, Prairie Ronde, Romeo, Sand Lake, South Haven, Vassar, Wyandotte; scarlet fever at seventeen places, Cadillac, Detroit, Dorr, Dowagiac, Fairfield, Grand Rapids, Howard City, Ionia, Jerome, Kalamazoo, Monroe, Muir, Muskegon, Swartz Creek, St. John, Vicksburg, Wexford; measles at Detroit and Whitehall.

For the week ending October 4, 1884, the reports indicate that typhoid fever considerably increased, that influenza, tonsillitis, cholera infantum, inflammation of kidney, and diarrhoea increased, and that cerebro-spinal meningitis, inflammation of the brain, and bronchitis decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending October 4, were south-west; and, compared with the preceding week, the temperature was higher, the absolute and the relative humidity more, and the day and the night ozone less.

Including reports by regular observers and others, diphtheria was reported present during the week ending October 4, and since, at thirteen places, namely, Armada, Detroit, Douglas, Edmore, Garfield, Handy, Howard City, Lyons, Kalamazoo, Marcellus, Muskegon, Sand Lake, and Wyandotte; scarlet fever at six places, Coldwater, Detroit, Grand Rapids, Ishpeming, Leeland, and Manistee; measles at Marcellus and Whitehall.

For the week ending October 11, 1884, the reports indicate that rheumatism, pneumonia, and inflammation of the brain increased, and that whooping-cough, consumption, and influenza decreased in area of prevalence.

At the State Capitol the prevailing winds during the week ending October 11, were south-west; and, compared with the preceding week, the temperature was lower, the relative and the absolute humidity and the night ozone were less and the day ozone more.

Including reports by regular observers and others, diphtheria was reported present during the week ending October 11, and since, at thirteen places, namely, Detroit, East Sagi-

naw, Garfield, Grand Haven, Handy, Howard City, Houghton, Kalamazoo, Leelanaw, Marcellus, Northport, Port Austin; scarlet fever at six places, Cadillac, Detroit, Grand Rapids, Ishpeming, Kalamazoo, Vicksburg; measles at four places, Cadillac, Detroit, Marcellus, and Whitehall.

HENRY B. BAKER,
Secretary.
Per. E. F. S.

LANSING, Oct., 1884.

Michigan State Board of Health.

The regular quarterly meeting of the Michigan State Board of Health was held at Lansing, Oct. 7, 1884, the following members being present: Henry F. Lyster, M. D., of Detroit; J. H. Kellogg, M. D., of Battle Creek; C. V. Tyler, M. D., of Bay City; and Henry B. Baker, M. D., secretary.

The secretary's reports of property, etc., for the fiscal year ending Sept. 30, 1884, showed that large accessions had been made to the library by gift and exchange, and a lesser number by purchase, and that unusually large distributions of public health documents had been made during the year.

Prof. R. C. Kedzie presented nine samples of drinking water taken from the public water supplies of Bay City, West Bay City, Grand Haven, and Ludington, all of which showed large quantities of organic matter and other impurities. Prof. Kedzie was granted till Nov. 1st to complete his paper on "Potash and Culinary Waters in Michigan, with Especial Reference to Contamination by Sawdust," for publication in the report of the board for 1884. Dr. Kedzie was also requested to make a special report on the use of explosive substances for heating and lighting purposes.

It was decided to hold a sanitary convention at East Saginaw in December, and a committee was appointed to confer with a local committee as to date, program, etc.

At a request of the Board of Corrections and Charities, committees were appointed to examine and report on the sanitary condition of the State House of Correction at Ionia; and on the sanitary bearings of the use of boiler iron for cells in jails.

The secretary continued his report on outbreaks of cheese-poisoning. Severe outbreaks in Michigan had been reported this year, in which there were 190 cases of sickness, but no deaths. The symptoms following the eating of the cheese were very simi-

lar in all cases, consisting of pain in the stomach, cramping of muscles, coldness of extremities, and great prostration, with violent retching and purging, lasting for several hours. In most cases the larger the amount of cheese eaten, the more violent were the symptoms. Samples of the Lowell cheese had an acid reaction and a peculiar strong odor, believed to be due to caprylic acid or caproic acid; examined with a one-tenth inch immersion objective, this cheese was found to contain the mycelium of a mold, and to be swarming with several kinds of actively moving bacteria. Samples of the cheese were sent to Dr. V. C. Vaughn, of Michigan University, and to Prof. T. J. Burrill, of Illinois State Industrial University, for further examination and experiment.

Further time was given to the committee on text-books on physiology and hygiene. The secretary called attention to a sanitary house-to-house inspection which had recently been made in the city of Ann Arbor. It is believed that this is the first systematic inspection of the kind ever made in this State.

A paper on Typhoid Fever was presented by the secretary, and was approved for publication in the annual report of this board.

The State has been free from small-pox during the quarter.

The recent report that pleuro-pneumonia exists among cattle in the vicinity of Nashville, Mich., proved on inquiry to be unfounded. During the quarter glanders was reported present among horses in Delta county. Letters were sent to health officers or supervisors of all townships where the disease was reported to exist, urging prompt action on the part of the local boards of health to exterminate the disease. It is believed that there are fewer cases than were at first reported. As one result of the correspondence, two of the infected horses were shot by their owner.

The secretary reported the preparation, publication, and distribution of 12,000 copies of the document on the Prevention and Restriction of Cholera. A similar document on Cholera in its Relation to Railroads had also been prepared at the request of the commissioner of railroads, and had been printed and distributed by the commissioner, in connection with a circular from his office to all railroad officials in Michigan.

A list of the names and addresses of the health officers of Michigan has been printed, and a copy sent to each local board of health. The document on the Restriction and Pre-

vention of Diphtheria has been revised, with reference to new laws, and reprinted. The new compilation of the public health laws has been distributed to every health officer in the state—a class of persons who do not receive the session laws.

Proceedings of the Wayne County Medical Society.

Detroit, Oct. 9th, 1884.

The Wayne County Medical Society convened this evening in annual session, with the president, William Brodie, in the chair.

The secretary's and treasurer's reports, showing that the society is in a flourishing condition, were read. The secretary's was adopted, and the treasurer's referred to the finance committee.

Dr. Wm. Brodie, the president, then read his annual address, which was accepted with thanks, and that part of it which referred to gratuitous medical services referred to a special committee of Drs. Book, Klein and Wyman. This committee to report at the next regular meeting.

ELECTION OF OFFICERS.

After the address the following officers for the ensuing year were elected by ballot.

President—C. C. Yemans, M. D.

Vice-President—J. J. Mulheron, M. D.

Secretary—W. H. Rouse, M. D.

Treasurer—C. A. Devendorf, M. D.

Board of Directors—Drs. C. C. Yemans, ex-off.; W. H. Rouse, ex-off.; C. Henry Leonard; C. J. Lundy; E. P. Christian; O. P. Eaton; G. R. Richards.

Dr. Hal C. Wyman volunteered to read a paper on Dermoid Cysts, at the next meeting of the Society.

PRESENTATION.

At the close of these exercises Dr. Klein, on behalf of the members of the society, presented the retiring president a beautiful walnut office desk. Dr. Klein, in his usual happy style, hoped the memento would be accepted as a slight token of the high regard each member entertained of the retiring president.

Dr. Brodie, in accepting this token, expressed a deep sense of gratitude to the society for this and also for many other expressions of esteem shown him by its members. Though greatly attached to his old desk, which has done good service for so

many years, the associations which surround this new one will ever awaken the most pleasing recollections of the many happy hours he has spent with the Wayne County Medical Society.

At the close of these exercises Dr. Wm. Brodie invited the members to the dining-room where an hour was spent in convivial enjoyment in a manner worthy of the profession.

W. H. ROUSE,

Secretary.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The State Boards of Health on the Prevention of Cholera.

IT is the general belief that cholera will reach America next year. The pertinent question is what shall be done to prevent it or at least to mitigate its ills? Various answers have been made to this query which has perplexed many sanitarians and other thoughtful men, to say nothing of the social and business interests involved. October 14th the representatives of all but two of the state boards of health in North America, met in St. Louis, Mo., to discuss this question and to give some answer that they were willing to go to the battle with. After very earnest discussion they adopted the following report made by a committee composed of Dr. H. B. Baker, secretary of the Michigan State Board of Health, chairman; Dr. H. P. Wolcott, secretary of the Massachusetts Board of Health; Dr. S. S. Herrick, secretary of the Louisiana Board; Dr. Peter H. Bryce, secretary of the Illinois State Board of Health. We give the full text as published in the St. Louis *Globe-Democrat*, without comment at this time:

ORIGIN AND DISSEMINATION.

There are three essential factors to the prevalence of cholera in this country as an epidemic: (1) The importation of the disease by means of ships more or less directly from its only place of origin in India; (2) local unsanitary conditions favorable to the reception and development of the disease; (3) persons sick with the disease in some of its stages, or things infected by such sick persons, to carry it from place to place. These three factors naturally suggest the methods of combatting the disease, for which there is

needed practical work, international, national and interstate, state and local. So far as relates to state and local boards of health, their organization and activities are greater than ever before; but it must be admitted that after cholera has been introduced into a country, inland quarantines are not easily and successfully maintained, although efforts in this direction are then advisable. In view of the threatened introduction of cholera into this country during the coming year, and the consequent immense waste of life and property values through derangements of commerce, trade, and productive industries, it is the sense of this conference that the general government should maintain such a national health service as shall, by rigid inspection at the port of embarkation, question the freedom from disease and infection of all persons and things from infected districts; and shall secure the surveillance of such persons and things while on shipboard, and when necessary, detention at quarantine stations on this side for treatment and disinfection.

OFFICIAL INSPECTION.

In view of the present threatening aspect of Asiatic cholera, and the constant danger from other communicable diseases occurring at foreign ports having commercial relations with the United States, we urge upon Congress to provide for the appointment and maintenance at all such foreign ports where cholera, yellow fever, plague, small-pox, of scarlet fever exist or are liable to exist, or either accredited consuls or attached to the consulates. The duties of these officers shall be: To give notice, by telegraph, when practicable, of the existence or appearance of any of the above named diseases to some constituted authority in this country; to give notice of the departure of any vessel known or suspected to be infected for any port in the United States; and, whenever requested by the master of any vessel about to load or leave for this country, to inspect thoroughly each vessel in all her parts, and also her cargo, her crew and passengers; to use such cleansing and disinfection as he may deem necessary, and to satisfy himself that all persons about to sail are free from dangerous communicable diseases, are not recently from infected places, and are properly protected from small-pox, giving to her commander a certificate of the inspection and of all precautionary measures taken. And it shall be the duty of the central authority in this country to transmit promptly intelligence

of the existence of the above-mentioned diseases at foreign ports and places, and of the departure of dangerous vessels for the United States and Canada, to all state and local authorities in the country which may be interested in the same.

We further recommend, in case of those foreign ports which have no consular agents in this country, or no telegraphic communication with this country, and which are liable to transmit pestilence through commercial intercourse, that one or more medical officers be chosen to visit such ports as often as may be deemed necessary by the central health authority in this country, so as to give trustworthy information of the health and sanitary condition of those places.

CANADIAN HEALTH ALLIANCE.

Inasmuch as the Dominion of Canada is equally interested with the United States in protecting itself and the United States from the importation of dangerous diseases, we suggest that Congress take such measures as will bring about concerted action with the Dominion and the British Government by which the consuls of this country or of England at foreign ports shall examine and take such action as they may deem effective, and notify the authorities of such government as has authority over any port to which any ship may sail in the United States and Canada, in order that such government may be in a position to take effective measures against the importation of these diseases. We are gratified that the authorities of the Dominion of Canada and of the Province of Ontario have taken active steps toward protecting the people of Canada and indirectly those of the United States, by the adoption of extensive quarantine regulations. We feel, however, that with respect to those regulations regarding the landing of passengers from the mail steamers along the St. Lawrence, etc., further special regulations for the thorough disinfection of the baggage and effects of all passengers, cabin or steerage, who come from infected ports and places, should be carried out in a manner similar to that recommended by the National Board of Health. Believing that the importation of cholera into this country has usually attended the presence of immigrants from infected countries, we therefore recommend that all such immigrants be prevented from landing at our ports until such time as the danger of the introduction of cholera by them shall have passed.

The inspection and quarantine service inaugurated by the National Board of Health, and set forth in the paper by Dr. Smart before this conference, but which system is now inoperative for want of an appropriation by Congress, meets with our cordial approval. To enable these protective measures to be carried out, we recommend that Congress be urged in the strongest terms to legislate on this subject at an early date in its coming session, and to appropriate such funds as may be needful. The expenses incident to the work which has to be performed at foreign ports, and the establishment of refuge stations at points on our coast for the detention and treatment of infected vessels arriving from foreign ports, should undoubtedly be borne by the National Government, and not by individual states or municipalities, for the benefits accruing therefrom are general and not restricted to localities, although some ports and cities on the coast may have a more immediate interest in the matter than others in the interior. It is probably, however, that this national protective work may not be sufficient.

LOCAL SAFEGUARD.

It will undoubtedly delay and lessen the chances of invasion, but it will not prevent invasion; the poison of the disease is subtle, and may effect an entrance into the country at some unguarded point. The funds necessary to the stamping out of the disease in a particular locality, and to the prevention of its spread to other localities might in some instances be borne by the municipality or state affected; but should the disease occur in a locality which has failed or is unable to make provision for the occurrence, its spread to other cities and states would be imminent. The want of means at the infected point would be disastrous to many others. Congress has recognized the necessity for the aid to state and local boards of health under similar conditions in the case of yellow fever. In 1879 the sum of \$500,000 was appropriated and placed at the disposal of the National Board of Health; and the records show that of this sum \$160,000 was employed in combating the epidemic of that year. We therefore recommend that the influence of this Conference be used with the view of having appropriated by the National legislature the sum of \$500,000, to be used, or as much thereof as may be needful, in case of a cholera invasion, in stamping out the disease from

the infected localities, and in preventing its spread from state to state.

The removal of local unsanitary conditions favorable to the development of cholera is the especial work of state and local boards of health. Much has been done already in some states, but much remains which should receive immediate attention. Where it can be done, State Sanitary Inspectors should be appointed to visit all towns and cities specially liable to the disease, to counsel with the local authorities as to the best methods of prevention. This work should be vigorously prosecuted before the disease reaches our shores.

ADVICE TO CITIZENS.

The cause of cholera is contained in the discharges from persons affected by the disease, or in things infected by such discharges. Should the disease reach our shores, the first case, and after this the first case which reaches any given community, should be strictly isolated; all infective material from these and from any subsequent cases should be destroyed in such a manner as to stamp out the disease. Intelligent sanitary precautions beforehand and scientific disinfection and treatment in the presence of the disease should take the place of the necessary cruelties of a panic. In case any town is infected, the same principles of isolation should in general be applied to the city as to the infected individual. Intercourse with other cities and places should be under sanitary supervision, substantially as set forth in the rules and regulations of the National Board of Health, respecting the inspection of travelers, disinfection of effects, vehicles, etc.

Health officers and inspectors appointed by state or provincial boards of health should, in addition to other sanitary work, see that the localities have set apart, erected, or planned to be set apart or erected, structures which shall possess the sanitary requirements of an isolation hospital. But as regards all necessary work by local Boards of Health, most state and provincial Boards of Health have printed and issued documents which give ample instructions.

Your committee recommend that when this Conference adjourns, it be to meet in Washington, D. C., the second Tuesday in December next, and that the secretary of the Conference be directed to invite the attendance at that time of the quarantine officers and the health officers of the principal cities of the United States and Canada, and that all delegates to that meeting be prepared to report.

the sanitary status of their state or locality, and what steps have been taken to improve the same and to prevent the introduction of disease.

A Scheme for the Collective Investigation of Disease by the Combined Efforts of the Profession in all Civilized Countries.

AT THE last meeting of the International Medical Congress in Copenhagen, it was determined to organize the entire medical profession of all lands in the study of certain diseases. It is hoped that in this way results may be attained, otherwise impossible to reach. The value of organizing a state or a nation in such studies has already been demonstrated. If all nations can be harnessed to one task, what may we not hope to gain? As to the end proposed, all will agree that it is desirable, though some may question its practicability. All will depend upon the organizers. If they so arrange matters as to enlist the co-operation of representative men in each country, all will be well. The details respecting each country must be worked up by the representatives of that country upon the committee. It must be that there shall be a greater knowledge of the members of the profession in each country of the members in other countries. Not only so, but the peculiarities of the people, of the different climates, of all the influences which modify human life, either in its physiological or pathological relations, etc., will all be more forcibly brought to the knowledge of each country.

Without farther comment at this time, we give the full text of the committee as follows:

The General Meeting of the International Medical Congress, held at Copenhagen on August 14th, 1884, upon propositions made by Sir James Paget, Professor Ewald of Berlin, Professor Bouchard of Paris, and Dr. Billings of Washington, passed the following resolutions:

1. That an International Committee be formed for the Collective Investigation of Disease, in connection with the work of the International Medical Congress.

2. That the following gentlemen do represent their respective countries thereon:

Denmark—Professors Thier and C. Lange, of Copenhagen.

Scandinavia—Dr. E. Bull, of Christiania.

Russia—Dr. Rauchfuss, of St. Petersburg.

Germany—Professors Ewald and Bernhardt, of Berlin.

Austria-Hungary—Professor Schnitzler, of Vienna; Professor Pribram, of Prague; to whom was added by co-optation, Professor Korányi, of Buda-Pest.

Switzerland—Professor Despigne, of Geneva.

France—Professor Bouchard, of Paris; Dr. Lépine, of Lyon.

Great Britain and Ireland—Sir William W. Gull, Bart.; Professor Humphry, of Cambridge; Dr. Mahomed, of London.

British India—Sir Joseph Fayrer, R.C.S.I.

United States—Professor Jacobi, of New York; Professor N. S. Davis, of Chicago.

South America—Dr. Gutiérrez-Ponce, of Paris.

Secretary-General—Dr. Isambard Owen, of London.

Representatives of other countries to be hereafter appointed.

In accordance with the following resolution of the first meeting of the above Committee, held at Copenhagen on the following day, viz.:

"That the Secretary be instructed to prepare a statement as to the objects of the Committee, for translation and publication in the journals of the various countries represented;"

I beg leave to submit the following statement to the members of the medical profession of.....

ISAMBARD OWEN,

Secretary-General.

5 Hertford Street, Mayfair, London.

The main objects which the Committee seeks to attain through the Collective Investigation of Disease, are to widen the basis of medical Science, to gather and store the mass of information that at present goes to waste, to verify or correct existing opinions, to discover laws where now only irregularity is perceived, to amplify our knowledge of rare affections, and to ascertain such points as the geographical distribution of diseases and their modifications in different districts. It will be its endeavor to place clearly before the whole profession the limits and defects of existing knowledge, as well as to stimulate observation, and to give it a definite direction. It will be a not unimportant incidental result of its work should it tend, as is hoped, to the better training of the members of the profession in habits of scientific and practical observation, and in systematic methods of recording the facts which they observe.

The age in which we live has seen enormous advances in the sciences on which the fabric of medicine rests, such as chemistry and other branches of physics, physiology and pathology. Each of these has taken giant strides. It must be admitted, however, that purely medical knowledge has scarcely made proportionate progress. It cannot be expected that it should do so, as it deals with the aberrations of the most complex of organisms, is of all sciences the most difficult, and demands the greatest patience and the largest accumulation of data.

Hitherto the advancement of medical science has been brought about mainly by individual effort. The value of such work in the past we in no way underrate, nor do we desire to lessen the amount of it in the future; but in medical science there is much that defies interpretation from individual experience, and many problems so far-reaching in an ever-widening field, with elements so manifold, that no single man, however gifted and long-lived, can hope to bring the whole within his range. The need, therefore, in medicine, of that combination and concentration of individual work which is adopted in many other branches of science and in commerce, and to which increasing facilities of intercommunication have given so much impulse and so much strength, cannot be questioned. Indeed, it may be said, resting on individual research alone, medical knowledge can be advanced but slowly and with difficulty. Future progress to any great extent must be the work, not of units acting disconnectedly, but of the collected force of many acting as one. For many to act as one, organization is needed; that organization it is the purpose of our committee to supply.

Disease is many-sided; and we wish to include in our organization those who see it from every side. All, therefore, whether hospital physicians, family and school attendants, specialists, medical officers of the army and navy, and of workhouses and asylums, will be asked to contribute their quota of observations to the common fund.

In England and Germany organizations for this purpose already exist, through which good work has been accomplished; and a volume entitled the *Collective Investigation Record*, containing tabulated returns, with reports upon them and other matter, is published annually by the British Medical Association. France and Australia are alive to the importance of the new method. In Scandinavia and

in the United States the foundations of associations have been laid. Denmark, Russia and Switzerland are setting their hands to the task. To unite these several associations by an international organization for the study of various problems, and to induce the formation of similar combinations elsewhere, is felt to be a work peculiarly befitting an international congress. Our committee is enjoined by the congress at Copenhagen to endeavor to carry out this work, and, in compliance with that injunction, it invites the co-operation of all who have at heart the promotion of medical science and practice.

The following is the proposed method. A subject having been selected, a person or persons of acknowledged authority will be asked to write a memorandum, in the form of a short essay, upon it. The memorandum will succinctly give the present state of our knowledge. It will also point out the directions in which further research may best be made; and, with this view, will suggest a few simple definite questions upon the subject selected. The questions will relate to matters of fact, to be elicited by observation of cases, rather than to matters of opinion.

The contemplated organization will, it is hoped, in time enable the committee to ask and collect answers to these questions from the profession at large wherever scientific medicine is studied or practiced. It will be a farther duty to examine, arrange, tabulate, and deduce results from the mass of observation thus collected, due credit being given to each contributor for the information he has furnished, and reports of the results of the several investigations will be laid before the international congress at its next meeting at Washington.

The Endowment of the College of Physicians and Surgeons of New York City.

Mr. Wm. H. Vanderbilt has recently given to the College of Physicians and Surgeons of New York City half a million dollars. It previously had an endowment of two hundred thousand dollars. In so far as we can learn, this is the largest endowment of any of the medical colleges of the United States. What does it propose to do with this money, is a question of general professional interest. It is announced that the trustees have bought lots, and will at once proceed to the erection of appropriate buildings for the conduct of the school. The location selected is the west half of the block between Fifty-ninth and

Sixtieth streets and Ninth and Tenth avenues. The space is three hundred and fifty feet long by two hundred wide. Roosevelt hospital occupies an entire block just adjoining. The West Side elevated railroad and the Sixtieth street railroad give it rapid connection with N. Y. hospital and with the East Side hospitals. The location is an innovation on past methods of locating medical colleges, but doubtless good reasons were potent in determining the choice. With dispensaries and the reorganization of Roosevelt hospital, magnificent clinical facilities can be had exclusive of the other medical schools. It is possible that in this manner the students of the old school may have the same clinical facilities which they possessed before Bellevue was started, and brought hordes of such rough students that all were excluded from all the hospitals except from the lecture rooms. It must be that in the new building laboratories of all sorts needful for the proper training of medical students will find a place. Practical anatomy, practical physiology, practical chemistry, practical pharmacology, practical histology, practical pathology, must each find a proper place in the new future of this celebrated school. Hitherto the laboratory training and laboratory facilities of all the New York medical schools have been utterly unworthy of the name. Practical anatomy alone needs to be excepted from this statement. In the eight months now required by the college there will be time for a respectable course in each practical branch. If, as we hope, it shall extend its course to three years, there will be abundant opportunity to even surpass either Harvard or the University of Pennsylvania in its actual requirements. For all practical purposes it is now independent of students' fees, and can make such requirements as it may deem best in the interests of medical education and the medical profession. Its past record leads us to hope that it will now lead all American medical schools in the thoroughness of its requirements for the degree of doctor of medicine, and that it will furnish the very best facilities for meeting those requirements.

In common with all the alumni of the old college, we tender our hearty congratulations, and express our belief that the college has entered upon a career of progress honorable not only to its alumni, but to the entire medical profession and the common country of us all.

Mr. Vanderbilt did a wise thing, both for the medical school in question and for the perpetuity of his own name. Nowhere has

he placed money that will keep his name and memory green through all the ages that shall measure the life of this republic, so long as this half million of dollars. His wisdom is shown in his selecting an old and well-established institution, honored wherever medicine is scientifically studied. It has often seemed to us strange that rich men do not more frequently build their monuments before they die, in their contributions to the prosperity of educational institutions so established that they practically will abide forever, and to each rising generation teach the beneficent provision of him who furnished the facilities for mental and moral culture. What millionaire is there to follow in the path here pointed out? Medical schools have been the latest to receive endowments, but we shall hope that they shall not receive the least of endowment.

The Report of the Marseilles Cholera Commission.

The details of the work of this commission have not as yet reached the public. But the conclusions of the commission were published in the *British Medical Journal*, Oct. 4, 1884. It is interesting to observe that this report tells us more than we do not know even if it fails to tell us what cholera is. To know what cholera is not is great gain.

1. Cholera is transmittable to the rabbit, as the blood of a cholera patient injected into the veins of a rabbit caused death in twenty-four hours, with lesions similar to those of cholera.

2. By cultivation, this blood, after a few hours, loses its infectious properties.

3. Injections of choleraic blood in the period of reaction, or a very advanced algid period, produce no effect.

4. The perspiration of a cholera patient injected into the veins does not transmit cholera.

5. The stomachic or intestinal dejections or the gastro intestinal contents may, after filtration, be injected with impunity into the cellular tissues of the peritoneum, the windpipe, the intestines, the rectum, or even the blood.

6. Comma bacilli taken from the intestines of a cholera patient, may be introduced into the intestines of a rabbit and multiply there for more than eleven days without producing any cholera symptoms, and without necropsy revealing the anatomico-pathological lesions characteristic of cholera.

7. There is thus every proof of the non-specificity of the comma cholera bacillus. Experiments were made with bacilli taken from the intestines, and with dejections kept from two to ten days, the results being always negative. Everything proves that this bacillus does not produce in the intestine toxical ptomaines which would be the cause of the poisoning—namely, the lesions of the blood. The inference from fifty experiments is that cholera is non-contagious.

8. The minute examination made by us upon the heart and large venous blood-vessels of cholera patients enables us to say that there is no phlebocarditis in cholera as alleged by Morgagni.

9. Bulbar and medullary lesions, or those of the solar plexus, appear to us to be all secondary lesions.

10. In our opinion the initial lesion of cholera takes place in the blood.

11. It consists essentially in the softening of the hæmoglobin, which makes some corpuscles lose their form, their clear shape, and the faculty of being indented. Those corpuscles adhere together, lengthen out, and in very rapid cases especially some are seen which are quite healthy.

12. The entire loss of elasticity of the corpuscle (which is seen in the preservation of an elliptical form when once stretched out) is a certain sign of death. Only a portion of the corpuscles are at first affected. If the case advances toward a fatal end, the number of inelastic corpuscles increases, while if it be getting better, the number of these corpuscles will diminish.

The Fifth Volume of the Index Catalogue of the Library of the Surgeon-General's Office, U. S. A.

Beyond a doubt this is the monumental literary work, in a medical way, of this century. In fact, it may be questioned whether, of a literary character, any work has ever been issued on medical matters which begins to compare with it. It is an honor, which constantly increases as the successive volumes appear, for both of the parties interested in its production, and all are benefited thereby. It is such a work as only governments can issue, as the expense of its production is very great and the sale very small. However it may be respecting the expenditure of vast sums of government money, there can be no question that that is well spent which is called for in the issue of this catalogue. No Con-

gressman need be ashamed to go to his constituents and account for his vote on the making of this appropriation.

The volume contains one thousand and fifty-five pages, giving us the authors and subjects from "Flaccus" to "Hearth." Thus it appears that the five volumes thus far issued only bring the catalogue to "Hearth." This volume contains fifteen thousand five hundred and fifty-five author titles, nearly six thousand of which are volumes and the rest pamphlets. It includes over eight thousand subject titles, and over thirty-four thousand titles of articles in periodicals. Thus far the five volumes have catalogued over forty-nine subject titles of books, and nearly one hundred and eighty-four thousand subject titles of journal articles. Of author titles they have given nearly thirty-one thousand volumes, and over forty thousand pamphlets. The enormity of these figures will be apparent only to such as have really looked over a few thousand volumes. The time and labor thus required may serve as a suggestion which shall enable them to have some realizing sense of this vast number of medical books and pamphlets.

Eleven pages are required to catalogue the new medical journals which have been started since the issue of the last volume. To illustrate the number of works in the library, we mention only one. On the subject of the heart, we find that the catalogue has one hundred pages, quarto size, double column, of the finest type. To him who fancies that he knows all that has been written on the heart, these pages are a revelation, and unless they utterly discourage, they will incite to a more modest opinion of his actual attainments.

It seems as if the publication of this work had attained such an impetus that it must go forward to a speedy completion. Such, at least, is the devout wish of every real student of medicine, and of every well-wisher of medical progress. To its conception and execution Dr. J. S. Billings has devoted his energies and the resources at his command. He has been admirably sustained by his commanding officers in the army. We trust that no Surgeon-General may ever be appointed who will interfere with the rapid preparation of this work.

The Home of Cholera.

Koch, in a late address on cholera (*Medical Press and Circular*, September 9, 1884) says that the only focus of cholera is the Ganges Delta of India. The upper portion

of the delta is inhabited, but the base, comprising an area of seven thousand five hundred square miles, is uninhabitable. In it the great streams, Ganges and Brahmapootra, lose themselves in a network of water courses, in which, with the ebb and flow of the tide, the sea water mixed with the river outflow, moves backward and forwards and at flood tide covers wide reaches of the triangle.

A rank vegetation and rich fauna have developed in this uninhabited country, inaccessible to human beings, because of the inundations, tigers, and pestilential fevers which attack all who attempt to stay long in this region. The enormous mass of organic matter always wet, and always hot as a tropical sun can make it, furnishes all the conditions for the rank development of micro-organisms. When under these conditions it is remembered that enormous quantities of dejecta are being constantly carried into this putrefying mass, nothing seems to be wanting to promote the worst of organic growths.

If once the cholera germs be cast into this cesspool, it is not clear how the development of cholera in those who live adjacent to it can be avoided.

It must also be remembered that each of the houses in the country bordering this cesspool, can only be constructed by digging a deep hole from which sufficient earth shall be obtained to make a foundation sufficiently above the marsh to avoid inundation. These holes become filled with water. From them the natives get water, in them they wash, and into them follows more or less of their dejecta.

As the holes have been filled up, and a pure water supply afforded, so has cholera disappeared. As a proof of this, in addition to other facts, he gives the history of Calcutta. The fort is not sewered, and cannot be. Formerly, the garrison was attacked by cholera every year. But in 1860 attention was paid to the water supply, and from that date cholera has disappeared from the fort. All other conditions remain exactly the same. The only difference was in the water. As this has continued for nearly a quarter of a century, it is fair to believe that the soldiers in the fort took the cholera from their drinking water.

The spread of cholera by the millions of pilgrims who journey to Mecca, drinking and defecating and washing in the same pools, is familiar to all, but it still farther serves to establish the author's proposition.

Medical Educational Humbugs.

There are a vast number of these, but we desire to call attention, very briefly, to two only. The first of these is the introductory lecture to medical college courses. This is the more honored in the breach than in the observance by most American medical colleges. A considerable number still retain it. We presume this is more from the force of custom than for any other reason. It is simply impossible to interest all the classes of persons gathered at such a place, in the usual topic. The elementary suggestions which are appropriate to a novice in the study of medicine, are a bore to the initiated student and to the outsider. A theme which would interest a third course student would be as Greek to the rest. Then as to instruction and suggestions, they come far better from the several teachers in the several departments. Practically, the introductory lectures are, as a rule, a ridiculous farce; anything but attractive or inspiring to the medical students.

The second humbug to which we direct attention, is the educational number of a medical journal. To issue such a number at or about the beginning of the college courses is the custom with some British journals. Some American journals have assayed to walk in the British way, but universally they have simply succeeded in spoiling an otherwise excellent journal, and doing no good to any person. As to the medical colleges of the United States, more can be learned from the last report of the Illinois State Board of Health than any medical journal can publish. This is the better because it is more correct than any one journal is likely to get its facts, in the time at its disposal. It is also far more complete. As to specific advice to medical students in the abstract, this is of little interest and less profit. Advice to medical students had best be given by a preceptor or one conversant with the student's disposition, means, etc. These educational numbers are usually stuffed with advertisements, so that it would seem as if they were intended mainly to increase the advertising income of the journal. Of all the journalistic humbugs this one demands most attention. So at least it seems to us.

The First Annual Meeting of the New York State Medical Association.

The programme for this meeting lies before us. It takes place Nov. 18th, 19th and 20th, in New York city. This association is the

outgrowth of an effort to maintain a connection between the medical profession of New York and that of the other states as represented in the American Medical Association. It has thus far made an excellent record for itself. The programme before us announces forty-three written papers, besides demonstrations, surgical operations, president's address, etc. The papers are from men well known throughout every portion of the state. Most sections are represented in this list of papers. Surely the medical profession will be greatly benefited by this meeting. If we were to make any criticism it would be that too little time is left for discussions. Intelligent discussion of papers is often of even more profit than the papers themselves. However, perhaps the papers will be brief enough to admit of sufficient discussion.

The array of professional talent which this programme shows to be united in the work of this society is gratifying to all friends of medical progress, and of the society in particular.

The old code is still honored in the Empire State by representative men. We like this method of exhibiting allegiance even better than acrimonious discussion. Work more than words finally wins in most conquests.

The Birmingham Method of Disposing of Sewerage.

In Birmingham, Eng., after much experimentation respecting the best and cheapest method of disposing of sewerage matter, the following plan has been adopted. The waste from the kitchen, etc., is weekly collected and burned in specially constructed furnaces. The heat thus obtained is used to dry the human excreta thus converting it into a valuable manure. Of course the human excreta are regularly collected and transported in closed vessels to the furnaces. In this manner was solved the problem. It was peculiar here, as the people living along the banks of the stream passing through the town, would not permit the sewerage to be discharged into the river. Certainly for inland towns, or those so situated as to be unable to discharge the sewerage into a large and rapidly flowing stream, or into the ocean where it must be carried away by the tides; this plan is worthy of imitation. Mr. Lawson Tait says that by this method the death rate of Birmingham has been reduced five per thousand. The sewerage problem is a difficult one varying for each locality. But it would seem

as if the Birmingham plan would work well in any place if only carried out in detail with the scrupulous care needful.

It is Farther from the East to the West than from the West to the East.

At the late meeting of the American Gynecological Society in Chicago, only three members were present from New York, two from Boston, two from Baltimore, and one from Philadelphia. Thus, even in this exclusive body, the eastern members will not come as far west as Chicago. They seem to think that the distance from the Atlantic coast to the Mississippi valley is vastly greater than that from the Mississippi valley to the Atlantic coast. Certainly it is only by some self sacrifice on the part of eastern men that a really national body can be maintained. It is unfair to suppose that the western members must always go to the east, and the eastern ones rarely, or never west. But this is the view which eastern men generally hold respecting the meetings of all national societies. By looking over the places of meetings of the several national societies it will appear either the meetings are held in the east in close proximity to New York or Philadelphia, or else few eastern men are present. This ought not so to be if a really national society is to be developed. Each should meet the other half-way.

Memoranda.

Hermann Zeissl, the syphilographer of Vienna, aged 67, is dead.

Tact, perseverance, and experience are the requisite qualities of a good doctor.

Dr. Fleetwood Churchill died of heart disease September 6th, aged 51 years. He was a son of the great obstetrician and gynecologist.

A Continental journal says that 67 persons die every minute, and 70 are born in the same time. Births exceed the deaths by three per minute.

The Minnesota College Hospital has been sold at mortgage sale. It did not pay. The College still continues, as its expenses are not so large.

Dr. Klein has so little faith in the poisonous nature of the comma bacillus, that he recently swallowed a quantity of the bacilli without any ill effect.

The first pharmacopœia published in the United States, was issued at Lititz, Lancaster Co., Pa., in 1776. It was written in Latin, by Dr. G. Brown, and contains 32 pages.

Jacky Broster who made a large fortune by curing stammering, made his pupils say "her" before each word beginning with a consonant. It is said that all that is needed is for the subject to make an audible note in expiration.

Mr. Lawson Tait says his success in abdominal surgery depends "on entire restriction to his chosen field, the most minute attention to every detail, and great personal attention to cleanliness in every part of his work."

Dr. Crothers (*Jour. Inebriety*) reports a case in which the cause of attacks of inebriety was bad air, lack of sunlight, and other bad hygienic conditions in his own splendid mansion. The removal to a healthy house cured the patient of his desire for alcohol.

A correspondent of the *Columbus Medical Journal*, says that since Dr. Knapp lost both eyes of a patient from jequirity, the drug is little used. Dr. Gruening has had numerous misfortunes in its use. Others also admit failures. Hence to talk jequirity in New York, is to be suppressed.

The *Maryland Medical Journal* says that, "probably no part of this country is to-day so enlightened in sanitation as the state of Michigan. This result is to be attributed chiefly to the influence of sanitary conventions, and the enlightened and zealous efforts of the secretary, Dr. H. B. Baker."

In the *Therapeutic Gazette* for October, Dr. A. B. Lyons presents the analyses of several specimens of menthol pencils. Most of them were largely composed of paraffin. Enough of menthol or oil of peppermint was added to give the characteristic odor. He gives simple methods of detecting this and other adulterations.

The International Congress will be held in Washington, 1887. The committee is Austin Flint, Lewis A. Sayre, I. Minis Hays, Christopher Johnston, of Baltimore; Geo. J. Englemann, of St. Louis; J. S. Brown, U. S. Navy, and J. S. Billings, of U. S. Army. This committee will do its work in a manner creditable to the country.

A nursery maid in London killed a child that she was wheeling because its crying

interfered with her reading. She choked it by tying a scarf about its neck to stop its noise. The abuse of children by nurse girls is something fearful to contemplate, but this is the first case of direct murder that we have ever seen reported.

The American Gynæcological Society elected as officers for the coming year: President, W. T. Howard, Baltimore, Md.; Vice-Presidents, W. L. Richardson, of Boston, Paul F. Mundie, of New York; Secretary, Frank P. Foster, of New York; Treasurer, Mathew D. Mann, Buffalo. Next place of meeting is Washington, D. C., on the third Tuesday in September, 1885.

The latest insurance craze in England is the insurance of infants. On new born babes a weekly payment of from half a penny to two pence is paid, and in the event of the baby's dying after three months a pound or more is paid to the parents. A doctor in the *Medical Press* says that he thinks many infants are put out of the way for the purpose of getting the insurance.

Dr. Chas. Warren, Statistician of the U. S. Bureau of Education, says that during the decade ending 1880 there was a far greater increase for each profession than there was increase of the population. In 1880 he believes that there was a surplus of professional men of over sixty-four thousand. Respecting lawyers and doctors he thinks the State should do something to limit the ruinous rate of their increase.

The next volume of the *Therapeutic Gazette* will be edited by Dr. H. C. Wood, of Philadelphia, Pa. He will be assisted by Dr. R. M. Smith, of the same place. The size of the journal will be increased to 72 pages, and the price advanced to \$2.00 a year. Dr. Wood is well and widely known as a medical journalist, as well as for excellent work in other directions. No doubt he will make the *Gazette* even a better journal than it has been in the past.

Health Commissioner Raymond has prohibited the use of tin-washed copper vessels for the manufacture or storage of soda water, mineral water or flavoring extracts. An extended investigation proved that practically these vessels are poisonous. Block tin and steel and glass must hereafter be used in the manufacture of soda fountains designed for sale in Brooklyn, N. Y. This is right, and it

is to be desired that the matter could be reached all over the country so readily.

The *New England Medical Monthly*, referring to the call upon the profession for funds to pay the expenses of the lawsuit of the Demonstrator of Anatomy, and now of funds to found a chair in Jefferson Medical College in honor of Dr. S. D. Gross, says, "Now it strikes us that Jefferson Medical College, of Philadelphia, is taking to itself all the "cheek" belonging to the medical profession of Philadelphia in thus applying for such help from the profession at large."

Dr. Welch, of New York (*Columbus Medical Journal*), is an enthusiast in making post-mortem examinations. If the examination is permitted, he makes it in the usual manner. But if objection is made he does it in this fashion: He makes it through the rectum. After he has taken by his hand and arm all that he desires from the abdominal and thoracic cavities, he puts back that which he does not want and sews up the anus inside, and no one knows that a post mortem has been made.

Dr. Severns (*Bost. Med. Jour.*) presents a study of nine hundred and seventy four deaths for which premiums were paid by a life insurance company. With reference to the relation of weight to death he reaches the following conclusions: For life insurance purposes men whose weight is above that laid down in the tables are better risks than those whose weight is less. Among the light weight persons the usual twenty per cent. which is assumed as within safe limits, is not safe. Light weights are likely to die of phthisis. Heavy weights require to be carefully studied as to the heart, kidneys and brain.

The Wayne County Medical Society elected as officers for the ensuing year: President, Dr. C. C. Yemans; vice-president, Dr. J. J. Mulheron; secretary, Dr. W. H. Rouse; treasurer, Dr. Deyendorf. The Society made a handsome present to Dr. Brodie, the retiring president.

The Detroit Medical and Library Association elected as officers for the ensuing year: President, Dr. David Inglis; vice-president, Dr. H. W. Longyear; secretary, Dr. Geo. Duffield; treasurer, Dr. Frank Brown; Dr. H. Erichsen.

Thus the medical societies of Detroit are organized for work during the coming season. We doubt not that they will accomplish even more and better work than they have in former years.

Dr. J. B. Lindsley (*Boston Med. Jour.*) says that "I am personally familiar with every cholera epidemic that has visited the United States during the past fifty years. Never has cholera come to Europe without coming to America; never has it come to America without coming to Tennessee and sweeping the State from one end to the other. The people of Tennessee have given the State Board of Health of Tennessee the power, if one case of cholera appears in Chicago, of stopping the Illinois Central railroad. If a case of cholera appears in New Orleans, the State Board will stop the same vehicle from the south. If it occurs in New York the same thing will happen, and six great lines of transportation from north to south, and at least a billion of dollars will be stopped in less than twenty-four hours."

Julius Wise, M. D., 806 Olive St., St. Louis, Mo., proposes to publish during the coming year a large volume under the title of *Encyclopædia of Medical Wit, Humor and Curiosities of Medicine*. In this undertaking he respectfully solicits the kindly aid of the profession. Witticisms, and anecdotes of a humorous, or curious nature are solicited. There are numberless unpublished experiences that would prove a source of amusement and instruction, and all physicians, druggists, dentists, and all others supplying original contributions will receive due credit in the work. Information regarding suitable literature—home and foreign, ancient and modern—will be gladly received, and highly appreciated. The author is especially anxious to avail himself of every source, and would highly appreciate all information concerning publications likely to be useful for reference. All letters, contributions, clippings, books and other matter should be addressed to Julius Wise, M. D., 806 Olive street, St. Louis, Mo.

The *Med. Record* tells the following sad story. In conversation some time since with a medical man of repute in a neighboring city he stated that he had taken no vacation for ten years. He could not afford to do so. He must be at his post night and day. He had a large family to support, and had no practice to lose. He never needed more, and cessation from work would be ruin. Further questioning showed that the life of this gentleman was one of constant worry, and his work was pain. Appetite and digestion were failing and he did not sleep well. He had become disgusted with his patients and practice,

and "it was with difficulty that he could treat them with any sympathy and patience." "I hate those old cases and those old faces" he said. "Collecting has become irksome, and the sight of an unpaid bill makes me desperate." The editor of the *Record* expostulated with him to no good result. Lately he has seen a notice of the physician's death from mental alienation and softening of the brain. The story points.

Ignorance in a nurse leads to some peculiar mistakes. A correspondent of the *Columbus Med. Jour.* relates the following as occurring in a ward of one of the N. Y. hospitals. A new orderly had been appointed who had never seen a man die. One evening he came running up to one of the physicians' rooms about midnight, and routed him out, saying breathlessly that "number 16 was dying." When the physician got to the ward, number 16 (who was an epileptic and had just had a fit) was all right. The young physician was disgusted at being waked up unnecessarily, and the poor German orderly was profuse in his apologies, saying "dot he hat no exsberience mit men dying," and promising not to repeat the mistake. A short time afterwards the physician was again waked up with apologies by the orderly, who asked him to go to the ward and see number 8. He said "dot man haint got no bulse, and he tont preeth any, and he vas cold, but I dinks dot he vas all ride." When the physician got to the ward the patient was stone dead.

The *New York Medical Journal* says that many medical men are suffering an irreparable loss in moral tone, in delicacy of feeling, and in tenderness toward suffering by a course of medical training upon the continent. An educated physician is more than an encyclopædia of facts; he is an honorable man because it is in him. The thin varnish of continental politeness or indifference is not suited to our society. Is a residence abroad likely to cultivate the instincts of a gentleman? Among the dangerous elements to be contended against are the "free and easy" moral atmosphere of the great continental capitals, notably Vienna; the light regard in which woman is held; the perfect subjection in which patients are kept; the cold blooded way in which patients are treated; methods of examination which must be unlearned at home. Hence, for such as are unable to resist these and other dangers of a student life on the continent, it is far better that they stay at home. This is a capital sug-

gestion. It has fallen to our lot to observe many whom a continental life had spoiled for all the purposes of a good physician.

At the late meeting of the American Gynæcological Society Dr. T. G. Thomas exhibited a mediæval relic. A friend of his had received it with a lot of antique articles which he had inherited from a relative dying in France. The relic as given to Dr. Thomas he describes (*Med. News*, Oct. 11) thus: It consists of a steel-jointed girdle, covered with velvet—intended to encircle the waist of the wearer—and a semi-circular rod of solid steel, with two circumscribed dilatations, joining the circular girdle at right angles. It was evidently meant to be employed in the same way, though for a different purpose, as the female T bandage. The diamond-shaped dilatation, intended to fit accurately the vulvar orifice, was guarded on both sides on the inner edge with sharp steel teeth, pointing downwards, forwards, and outwards. The circular ring designed for the anal orifice was provided with steel teeth in an identical manner. Armorial bearings were discovered upon different portions of the harness. Behind at the point of junction of the girdle with the perineal rod, was the place for the lock, or rather seal. The nature of the relic was plain. The crusaders were evidently in the habit of locking up home effects before their departure to the wars.

Editor's Book Table.

Loomis' Text-Book on Practical Medicine.*

For nearly twenty years Dr. Loomis has been one of the most fascinating teachers of practical medicine in this country. Clear, concise, fair in stating disputed points, looking at all subjects with the mind of an active physician, having an excellent voice and commanding address, he has been the attractive teacher of the University of New York Medical Department. The lectures before us are the outcome of the reiterated study of these subjects each year, and his experience as to the best phraseology in which to present his subject to the average student. It may be

*A TEXT-BOOK OF PRACTICAL MEDICINE, DESIGNED for the use of Students and Practitioners of Medicine. By Alfred L. Loomis, M. D., LL. D. With two hundred and eleven illustrations. New York: Wm. Wood & Co., 1884. Cloth, pp. 1102. For sale by John Macfarlane, Detroit, Mich.

fairly said that they represent the author's best teaching efforts. As the lectures interested and attracted large numbers of students, it is but logical to suppose that this book will attract large numbers of readers desiring to have the latest and best presentation of the medical thought of to-day.

The author has used freely of diagrams to illustrate the text. These are mainly fresh cuts, and for medical books they are artistically above the average. They are ever instructive, in making plainer the author's words. The book is divided into six sections, treating respectively of diseases of the respiratory organs, of the digestive system, including diseases of the liver, spleen and pancreas, diseases of the heart, blood vessels and kidneys, acute general diseases, chronic general diseases, and diseases of the nervous system, including diseases of the brain, spinal cord, and functional nervous diseases. A brief account of inflammation introduces the work.

As samples of his mode of thought as well as style, we give the following:—He says that diphtheritic inflammation differs from croupous thus: "It is a more intense hyperæmia, and a more extensive infiltration of the affected tissue. The fibrinous exudation is more abundant and granular, and there is a greater metamorphosis of the epithelial and tissue cells. In the membranous exudation, and the infiltrated tissues underlying it, are found multitudes of bacteria, and especially the micrococci. When the mucous and submucous tissues are so infiltrated as to cause undue pressure, and to cut off their nutritive supply, the affected tissue dies and sloughs away."

Is pneumonia a specific constitutional or an acute infectious disease, or a local inflammation? He gives the evidence in support of the several views, but inclines himself to the belief that it is an acute febrile disease.

Concerning the etiology of phthisis pulmonalis acute, he sums up the case as follows: "The presence of a distinct bacillus in connection with tubercle, and its absence in all other morbid conditions, are generally confirmed by the most competent observers. The etiological relations of this bacillus to phthisis still rests solely upon Koch's demonstration. Observers are not wanting who deny entirely not only the etiological relation, but even that this bacillus is confined to tubercular tissues; but they fail to present satisfactory proof in support of such statements. German pathologists, on the other hand, among whom

are Cohnheim, Frankell and Schottelius—at one time the most able opponents of the infectious character of tubercle—accept its specific nature as a fact entirely proven."

He strongly commends the high altitudes of Colorado for fibrous phthisis, but he says: "There is one grave objection to Colorado as a winter refuge: the enormous monthly, and also daily, range of temperature must severely try any invalid. During March, 1880, the thermal range at Denver was eighty-three degrees, and in December, 1879, it amounted to ninety-three degrees—a change in a single month greater than occurs in London in a whole year, and greater than occurs in New York in a whole winter." High altitudes he thinks inappropriate for catarrhal phthisis. For each case a climate must be selected suited to its peculiar features. He has obtained his best results in the Adirondac region of New York, and in Asheville, N. C., and in New Mexico. The dry belt of country north from San Antonio, Texas, he thinks has advantages over the moister climate of Florida. The entire chapter on climate is of great value, owing to the author's careful study of the subject for many years.

He wrote his chapters on cholera before Koch discovered his comma bacillus. Hence this portion of the subject is omitted.

He thinks that it is probable from recent experiments that the morbid agent in diphtheria is chemical rather than animal. While from clinical facts it seems that diphtheria starts locally, it is certain that it does not become manifest till it has become constitutional. His management of a diphtheritic patient he sums up thus: "A diphtheritic patient should be quarantined in a large, well-ventilated apartment, attended by a well-trained nurse; poultices should be applied externally to the throat; steam inhalation should be constant from the onset of the disease until the exudation has disappeared; iron and brandy should be given freely; the diet should be fluid—milk preferably; and the patient kept in bed until convalescence is complete."

It is impossible to look here for new facts, as these have long since become public property. But a scholarly grouping and stating of facts appears from the beginning to the end of the volume. It is a good book in all respects, and must be deservedly popular in the profession. The publishers have issued the work in their best style.

Wellner on "The Medical Graduate and His Needs.*"

This little book is the outcome of the author's observation, that recent medical graduates encounter certain difficulties in actual practice to meet which neither the books nor the medical schools have prepared them. While still a young practitioner he began to note down these difficulties and in the work before us he presents the results of his notes. In the hope of aiding others to overcome these difficulties he has written this book. The first thing that strikes us on reading it is the vein of good sense which pervades every page. The points made will not be new to the practitioner of a quarter of a century, but to the young graduate they will be largely novel and more largely helpful. In fact it strikes us that the book could be read with great profit by every young man who is considering the question of studying medicine, and if he does study medicine he could re-read it profitably every year thereafter.

"To attain the best results from the study and practice of medicine, he regards the following as the conditions of success, viz.: good health, inborn aptitude, and ample pecuniary means. With these conditions it is possible to surmount all obstacles to success; without them the result will be at best average professional ability, that is a wretched mediocrity which is everywhere at a notorious discount. Average ability in the physician in the present overcrowding of the ranks of the profession means mediocrity of success, and mediocrity of success means humiliation, debt, poverty."

Again he says "In college the student learns nothing of faith as a therapeutic adjuvant. In medicine faith is practical assent to whatever the physician does and says. It is more the manner than the matter that creates faith. "The secret of begetting faith is the utmost self-assurance in every act and word, of which the conscious power of ability, the halo of almightiness surrounding the master minds of the profession, are the best illustrations."

The several points made by the writer relate to the following subjects: The study of medicine, methodical clinical inquiry, the physician, on diagnosis, on prognosis, on

treatment, from graduation to practice, the material outfit, the hospital course, post-graduate study in New York, post-graduate study in Europe.

On prognosis he adduces the following axiom: "Inasmuch as it is impossible to predict anything with certainty so long as we remain unacquainted with any one of the conditions of a given event, and ignorant how they may act in a particular instance; and as in the living body no occurrence or effect ever does take place constantly in the same manner at all times, we can never with perfect certainty predict any occurrence or effect whatever." His suggestions respecting prognosis are correct.

In the chapter on treatment he emphasizes the importance of making all medicines as palatable as possible.

Respecting the motives which should animate the practitioners, he gives two, one scientific and the other commercial. The undue prominence of either of these is a loss. The physician wholly engrossed in the scientific aspect of his profession will have indifferent success as a practitioner. The doctor who practices with a single eye to his fees is false to his oath and false to his patients. Especially harmful is the predominance of the commercial spirit in the early years of professional life. It belittles his professional aims and lowers the standard of his preparatory work. The desire for prosperity is a legitimate incentive, so long as it does not predominate. The greater the interest in his work the more likely that it will be effective and fruitful. But the prevailing motive should be the desire to acquire competence in his art; all else should be subordinate. A competence in his pocket will follow, and it will be seen how commercial aims may coincide with the legitimate requirements of science. But interest of some kind he must have that is live and active. The spirit that actuates him must be a thoroughly earnest one, or little will be accomplished. The most productive work is always directed to ends in which the mind takes an absorbing interest. This interest in the medical man may be greatly augmented by judicious attention to his natural predilections in the choice of particular departments of study."

Altogether the work is worthy of careful reading by all physicians. It is not to be expected that all will endorse all of the positions taken, but all will be brought face to face with difficulties which some have wisely met and some have not. It will encourage the

*THE MEDICAL GRADUATE AND HIS NEEDS, by Geo. C. Wellner, M.D. Detroit, Mich.: George S. Davis, 1884. Cloth, pp. 100. For sale by John Macfarlane, Detroit.

unsuccessful and make the successful more thoughtful of their fellows. None of us are too old to ponder profitably upon the conditions of the best success.

Reese's Medical Jurisprudence.

The author of this work is an old laborer in this field, as a teacher, a journal writer, and medical expert. From all this experience he has drawn that which he has deemed of advantage to the student of legal medicine. He has made the work small so that none might be deterred from reading it by its ponderous dimensions. He has used a familiar non-technical style, so that all who began to read it might be sufficiently interested to complete the volume. The essentials are all here and within a very moderate compass too.

We desire to present certain portions of the work as illustrative of the whole. The matter of expert testimony is a source of dispute to all parties. The author gives his view of what it should be thus: "The only true and proper system is for the state to appoint one or more experts, who shall be state officers, physicians of thorough education and experience, and training in this particular line; who shall devote their time and attention exclusively to this duty, and for which they shall receive adequate compensation. Such an office, properly filled, and kept aloof from all political considerations, would, we believe, be of real benefit to the state. It would to a great extent, if not completely, abolish the unseemly contention of the experts in the court-room, inasmuch as the state expert (whose professional ability and moral standing should be absolutely unquestioned) would be present at every trial, and give the court and jury the results of his previous investigations in the case; and moreover, since he is presumed to be entirely impartial, without bias to either the prosecution or defense, his opinion would be generally received as final by both sides, and thus both contention and expense be avoided."

He advises the expert to follow these rules:

"1. He should prepare himself thoroughly upon all points bearing upon the case in which he is called upon to give evidence. He should be accurate as to weights, measures, distances, size, relationship of objects, etc.

2. He should maintain a quiet, dignified and composed demeanor on the stand, not exhibiting any irritability of temper, however much he may be provoked by opposing counsel. He should beware of any display of arrogance or assumption of manner, or testiness of behavior, which are sure to make him appear to disadvantage in the court-room.

3. The witness should give his answers in a clear and audible tone, addressing himself rather to the jury than the counsel, since the former are especially interested in his replies; and these replies, together with the explanations should always be given in the simplest possible language. They should be free from all ambiguity, otherwise they will require explanation, which is apt to rather weaken the testimony

4. He should never be afraid to say "I don't know," if he does not know. Nothing is more dangerous than for a witness to attempt to guess, for fear of being thought ignorant.

5. He should particularly avoid the use of all technical expressions and learned formulæ, in giving the results of an autopsy, or of a toxicological examination."

These suggestions are well worthy of consideration by all experts who have not already learned their importance by experience.

His account of postmortem examinations is worthy the attention of every medical man. The importance of a thorough and complete postmortem examination of every suspected case is but imperfectly realized by the mass of the medical profession. Hence, a very large number of criminals go free because the postmortem examination of the victim was done so shabbily as to give no positive evidence in the case.

Among the subjects discussed are the phenomena and signs of death; presumption of death and survivorship; personal identity; the causes producing violent death; examination of blood stains; burns and scalds; death from the different forms of asphyxia; death by lightning; death by heat; by cold; by starvation; by poisoning; poisoning by mineral acids, by the alkalies and their salts, by irritants possessing remote specific properties; by arsenic; by antimony; by mercury; by lead; by copper; by zinc; bismuth, tin, iron, chromium; vegetable and animal irritants; by neurotic poisons; by anæsthetics; depressants; asthenics, ptomaines. The feigned diseases are next considered; then pregnancy; fœti-

*TEXT-BOOK OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By John J. Reese, M. D. Philadelphia: P. Blakiston, Son & Co., 1884. Cloth, pp. 606; price \$4. For sale by John Macfarlane, Detroit.

cide; infanticide; legitimacy; rape; insanity; medical malpractice; life insurance.

It appears from this list of topics that the work is quite complete in the most practical subjects likely to come before the ordinary medical expert. That this volume will afford a safe guide for the physician who is called upon to perform expert duty there is no doubt. But aside from this the study of the book will afford suggestions of great importance to him in the performance of his daily duties.

Eustace Smith's "On the Diseases of Children."*

We already have very many excellent works on the diseases of children. This differs from them in being clinical in its scope and in aiming to describe every form of disease which is capable of being influenced by the age of the patient. The author has placed an especial emphasis upon diet and the hygienic treatment of diseases. In the matter of drugs he has confined himself to such as his experience has shown him to be most valuable. It follows from this that his *materia medica* is limited, yet not more so than is the *materia medica* of any single practitioner.

The work is divided into twelve chapters, treating of the acute infectious diseases, general diseases not infectious, the diathetic diseases, diseases of the ductless glands and blood, diseases of the nervous system, diseases of the organs of respiration, diseases of the heart, diseases of the mouth and throat, diseases of the digestive organs, diseases of the liver, diseases of the genito-urinary organs, and diseases of the skin. It will at once be noticed that nearly the whole ground of practical medicine is covered by this list. And yet, singularly enough, he has omitted all mention of *ophthalmia neonatorum*, in fact all diseases of the eyes in children are neglected. Certainly there are many diseases of the eye in children that call for attention. No doubt they are better described in the excellent works on ophthalmology, but the omission vitiates the purpose of the author as stated in his preface.

The introductory chapter is of especial interest. It points out the proper methods of

conducting an examination, the significance of certain signs, etc., and the effects of drugs peculiar to children. Thus he gives the following points respecting the significance of a child's cry. "A hungry infant in most cases clinches his hands and flexes his limbs as he utters his complaints, and will often continue to do so until his desires are satisfied. Thirst may also be a cause of crying, and may be suspected if the child sucks his lips repeatedly, has a dry mouth, or has been suffering from purging. If he be tortured by colicky pain, the cry is violent and paroxysmal, and is accompanied by uneasy movements of the body and jerking of the lower limbs. The belly is also full and hard, and there is often a blue tint round the mouth. A shrill scream uttered at intervals, the child lying in a drowsy state with closed eyes, is suggestive of tubercular meningitis.

A constant unappeasable screaming is often the consequence of *erache*. This painful affection is very common in infants, and should always be suspected if the lamentations continue without intermission, and the child frequently presses the side of his head against his mother's breast. The pain of pleurisy will also cause violent crying. In this case pressure upon the sides of the chest as in lifting up the child causes an evident increase in his suffering. Any alteration in the quality of the cry must be noted. It may be hoarse in a young infant from inherited syphilis, in an older child from laryngitis or enlargement of the bronchial glands.

In a healthy child a cry is excited at once by anything which causes him discomfort or inconvenience, therefore the absence of crying is a symptom which should always receive due attention, as it may betoken serious disease. In inflammatory affections of the lungs, in pulmonary collapse, and in advanced rickets where the bones are softened, a child will bear considerable discomfort without loud complaint for he has a pressing want of air and dare not hold his breath to cry. So also in severe diarrhoea or any other form of disease which causes great reduction of strength, the child, on account of his weakness, cries little if at all. In cases of profound weakness he will often be noticed to draw up the corners of his mouth and wrinkle his brows as if to cry without making any sound. After the age of three years the absence of tears in crying must be taken to indicate considerable danger."

The relations of the ear to the various diseases he fully states as is shown by his

A PRACTICAL TREATISE ON DISEASES OF CHILDREN, by Eustace Smith, M. D., Physician to the East London Children's Hospital, etc. New York: William Wood & Co. 1884, cloth. Price \$5. For sale by John Macfarlane, Detroit.

calling attention to the sudden deafness sometimes accompanying mumps. He also properly states the danger of permitting ears to discharge without trying to cure the source of the discharge.

As a whole the book is of great value to the practitioner. Its comprehensive character interferes with its usefulness to under-graduate students. They will prefer the American "Smith on Children." The profession at large will be grateful to the English Smith for his work on the diseases of children.

Davis' Lectures on the Principles and Practice of Medicine.*

The records of fifty years devoted to the study and practice of medicine including thirty-five years devoted to the teaching of medical students, must have a positive value to the medical profession. Such is the period over which the labors of Dr. Davis have extended. It was not necessary that old friends and students of Dr. Davis should request him to write a book, or that he should write it in order to aid in the popularization of the metric system of weights and measures; it was only necessary that it be understood that this volume gathers up the experience of a half century of active study and practice of medicine.

The author tells us that the substance of this book was delivered extemporaneously to his classes, and taken down by a shorthand reporter, and the notes of the reporter revised. He pleads the demands of an unusually active life as the reason why errors of expression may be found in the work. When it is borne in mind that during the period in which he has been writing this book, he has been editor and manager of the *Journal of the American Medical Association*, a weekly of the larger size, professor in Chicago Medical College, attending physician to Mercy Hospital, lecturer on temperance, etc., there is only occasion to wonder where the time and strength came to write at all. Certainly there are few men in the profession at the author's age who possess either the mental or physical endurance requisite for such sustained labor. In estimating the book this and more must be borne in mind.

The work contains 92 lectures. Five of

these treat of elementary considerations or principles of medicine; 17 treat of general diseases; and 59 of local diseases.

In his chapters on the principles of medicine he makes it plain that the comprehension of modern medicine is possible only to such as have mastered anatomy, physiology, chemistry, and physics. Farther, all the functions of the body have a normal variation within certain limits. He shows how it is impossible to build up a system of medicine upon the idea that all disease is a unit, or traceable to some one theory of morbid action. All theories contain some truth. With their eyes fixed upon this alone the advocates of each system fail to see the facts which contradict their theory. So also the so-called systems of therapeutics have failed because of their incompleteness.

He points out clearly the fact that nature is no longer a blind force, but a complex term to include a vast number of separate and combined processes, physiological, and chemical, and mechanical. The relations of the several physiological and therapeutic processes he sketches in outline, and yet in such a manner as to furnish an excellent basis for the study of the practical use of drugs. He rightly classes alcohol among those drugs which diminish temperature, retard somatic changes, diminish excretion, and diminish general susceptibility. His own well known experiments respecting the action of this remedy he gives briefly.

His rule for the administration of remedies he gives thus: "So investigate every case as to gain a clear and definite conception of the existing pathological conditions and then apply such remedies as are most likely to remove, both the morbid conditions and the causes on which they depend, without regard to the nosological arrangements or classifications of the materia medica. If no satisfactory idea can be obtained of the actual morbid conditions, then one must be content to palliate the symptoms from day to day by mild measures, rather than hazard the doing of positive injury by a blind exhibition of more active measures."

The lectures upon special diseases are forceful and interesting. That they represent the prevailing views upon the subjects of which they treat, all who have read Dr. Davis' writings will understand. Of course we are not to expect new facts, only the writer's modes of expressing and arranging old ones. This he has done so that all medical students will be both interested and profited thereby.

* LECTURES ON THE PRINCIPLES AND PRACTICE OF Medicine, delivered in Chicago Medical College, by Nathan Smith Davis, A. M., M. D., LL. D., Chicago, Ill. Jansen, McClurg & Co. 1884. Cloth, pp. 986.

We have no doubt that the work will have a large sale. The fact that it is contained in one volume, and in the form of lectures, will do much to popularize it with both physicians and medical students. The publishers have done their part well in all respects.

Burnett "On Disease of the Ear," Second Edition.*

As seven years have elapsed since the issue of the first edition of this work, a thorough revision was called for, in order to eliminate such views and statements as recent investigation had shown to be erroneous, and to insert in proper form all additions to our positive knowledge made in this period. To meet this end, almost every page required a recasting. Especially great are the changes in the following subjects: "Abnormalities of the auricle, otomycosis, the treatment of chronic otorrhœa, the treatment and classification of aural polypi, and the diagnosis, etiology and treatment of aural vertigo."

It is scarcely worth while to farther describe this book after it has been so long before the profession. It differs from other works on the ear in that the anatomy and physiology of the ear are given fully in detail, covering one hundred and fifty-six pages. Recent additions to these subjects have not been great, but most are gathered into the text. During his discussion of chronic otorrhœa he says: "Unhesitatingly it may be said that unless the otorrhœa is cured, the disease surely tends to extend to the brain. If it does not reach the brain, it may be because the patient will die of pyæmia and metastatic abscesses, before the central organ in the skull is reached." So grave is the danger to life that some of the British insurance companies refuse to risk their money by insuring one who has a chronic running ear. While this knowledge is apparently so clear, very many in the medical profession, to say nothing of the laity, think that a running ear should be let alone. From this false view many lives are lost every year, and now and then a physician falls a victim to it.

The discussion of aural vertigo is of great

interest not only to the aural surgeon, but to the general practitioner. In concluding, he directs attention to the following facts: "There are two sets of fibres in the auditory nerve, viz.: the sensory and the motor."

The motor filaments are connected on one side with the cerebellum by means of the inferior peduncles, and on the other side with the nerve filaments sent to the ampullæ of the semi-circular canals. The irritation of these ampullar nerves may be conveyed from either of the three parts of the auditory apparatus, or from the auditory nerve itself, in the mechanical form of pressure, and this irritation may be farther conveyed to the cerebellum and cause vertigo. It follows that this reflex cerebellar phenomenon as produced by aural irritation should receive the general term of aural vertigo. Meniere's disease is only a form of aural vertigo.

All specialists will be interested to read this work as representing the latest views on the subjects treated. Medical students and general practitioners who desire to learn enough of ear diseases to enable them to treat intelligently such cases as they desire to treat or cannot escape treating, will find this work admirably suited for their needs. Handsomely published, it is a credit to all parties who have united to make it.

Roberts on "Surgical Delusions and Follies."

This is an amplification of the author's address before the Pennsylvania State Medical society. The writer thinks that many surgical procedures are really relics of tradition, unsupported by modern research. Among the delusions thus classed are chloroform, anæsthesia, styptics; the fatality of small hæmorrhages; danger in trephining the skull, operative delay in strangulated hernia; operative delay in acute phlegmonous inflammation; operative delay in malignant tumors; the necessary fatality of traumatic tetanus; fatality of pericardial wounds; symmetry of normal limbs: uselessness of treating vicious union of fractures; primary bandage to fractured limbs; time of confinement for fractures of the tibia, fibula, and radius; propriety of early ligation in continuity of arteries for hæmorrhage; hopelessness of malignant rectal disease.

* THE EAR, its Anatomy, Physiology, and Diseases. A practical treatise for the use of students and practitioners, by Charles H. Burnett, A. M., M. D., with one hundred and seven illustrations. Second Edition. Philadelphia: Henry C. Lea's Son & Co. 1884. Sheep, pp. 585. For sale by John MacFarlane, Detroit.

SURGICAL DELUSIONS AND FOLLIES. By John B. Roberts, A. M., M. D. Philadelphia: P. Blakiston, Son & Co., 1884. Cloth, pp. 55. For sale by John MacFarlane, Detroit, Mich.

Of follies, he discusses the ether folly; the anæsthetic inhaler folly; the tourniquet folly; the incision folly; the sponge folly; the suture folly; the adhesive plaster folly; the aspirator folly; the drainage tube folly; the nitrate of silver folly; the leadwater and laudanum folly; the dose folly.

The dispelling of these delusions and the correction of these follies he claims as essential to the proper advancement of the surgical art.

The author's exact meaning by the term follies may be gathered from some illustrations. Thus as to doses. He claims it folly to follow the doses of the books. It is needful in every case to give such doses as will produce the desired effects. Failure in treatment is often due, not to diagnosis, not to the remedies employed but solely to the insufficient doses.

This little book will repay a careful reading by all.

Poore on Osteotomy and Osteoclasia.*

The correction of deformities by operations upon the bones has come into considerable prominence of late. Dr. Poore has collected the facts as now understood, adding thereto the results of his own experience. His object has been to concisely state the methods of operating and the after treatment of the case. The term osteotomy, while primarily meaning all sections of the bones, here is restricted to such sections of the bone as are made for the definite purpose of relieving some deformity. This deformity may be due to a badly united fracture, or to rickets. Indeed, most cases are due to the latter cause. The first chapter in the book treats of rickets in their bearing upon the production of deformities of the bones of the lower extremities. The next gives a history of the operation and the instruments for performing it. The next six chapters treat of the operations as applied to the individual bones of the lower extremities. The last two chapters are devoted to "osteoclasia." This term includes all correction of deformities of the long bones by means of forces which shall bend the bones to their proper place or break them into such place. The operation is employed for the correction of deformities after

fracture, for straightening of ankylosed joints, and for the correction of rachitic deformities. The apparatus for the performance of either operation in any location is fully described, as is also the proper method of procedure. In osteotomy the author shows that the success has greatly increased since surgeons have learned the importance of absolute cleanliness in all operations of this character. The book is well written, finely illustrated, and will prove of interest to all surgeons.

Sternberg on Malaria and Malarial Diseases.*

This work is a very attractive one, but as unsatisfactory as attractive. In the jumble which involves this subject, all are looking for light. The well-known reputation of Sternberg, as an investigator of this subject, led to the hope that he had some solution of the difficulties in which it is involved. But a careful reading of the book shows that the hope is utterly delusive.

With the most painstaking care he has ransacked all sources, for all known facts bearing upon the solution of the problem, only to leave the tangle as great as ever. In fact, there are but few facts settled beyond a dispute respecting the cause of this disease. On its course and treatment there is substantial unanimity. But the moment we ask, what is the cause of this disease? what is its nature? how can the cause be removed? then discordant answers begin to appear, and their vehemence is in proportion to their uncertainty, or unsoundness.

Still, the book will well repay a most careful study as exhibiting a most admirable statement of our present knowledge of this subject. It will furnish a solid basis for future observations and future experimentation.

The accounts of the several forms of malarial fever are reliable and complete.

Ziegler's Pathological Anatomy, Volume Two.†

The first volume we have already noticed as a portion of Wood's Medical Library.

***MALARIA AND MALARIAL DISEASES**, by George Sternberg, M. D. New York: William Wood & Co. 1884. Cloth, pp. 329. Sold only by subscription.

†**A TEXT-BOOK OF PATHOLOGICAL ANATOMY AND Pathogenesis**, by Ernst Ziegler, of the University Tübingen. Translated by Dr. D. McAllister. Part second. William Wood & Co., 1884. The Sept. issue of Wood's Library. Cloth, pp. 365. Sold only by subscription to the library for the entire year.

***OSTEOTOMY AND OSTEOCLASIS FOR DEFORMITIES OF the Lower Extremities**. By Charles T. Poore, M. D. New York: D. Appleton & Co., 1884. Cloth, pp. 187. For sale by John Macfarlane, Detroit, Mich.

Volume three will appear later. The volume before us treats in eight chapters the following subjects: Blood and lymph; the vascular mechanism; the spleen and lymphatic glands; the serous membrane; the skin; the mucous membranes; the alimentary tract; the liver and pancreas. The illustrations which accompany the text add greatly to its value.

The general character of this corresponds with that of the first volume. Facts are stated with remarkable accuracy and clearness in the fewest possible words. They are made to correspond very accurately with the very latest investigations. All practitioners can read the book with pleasure and profit. Students will find it extremely helpful. Altogether, the profession is to be congratulated that such a valuable work on pathology is to have such a wide circulation.

Hartigan on "The Lock Jaw of Infants."*

Some thirty years ago Dr. J. Marion Sims wrote a paper in which he claimed that the cause of lock-jaw in infants was pressure upon the brain from displaced cranial bones. He gave many cases in support of his view, but it has never come into general acceptance of the profession. Perhaps the reason for this is the relative infrequency of the affection. Be this as it may, Dr. Hartigan, of Washington, has taken up the study of the subject, and in the work before us reports forty-nine cases, all supporting Dr. Sims' views. He has also corresponded with a number of other physicians who have observed cases. Altogether, a mass of interesting facts are presented, well worth the attention of all students of this branch of medicine.

Partridge's "Manual of Obstetrics."†

This is one of Wood's series of pocket manuals. It contains as much useful knowledge as it is possible to place in it. The difficulty is, that a pint measure will not contain a barrel. The essentials, or even the outlines, of obstetrics cannot be compressed

within so small a space. Hence he, who depends upon it leans upon a broken reed. The practitioner of obstetrics and the student should master the fullest statement of his science and art before it is fitting for him to superintend a process fated with the greatest moment to two lives, and the happiness of many others.

Van Harlingen's Hand-Book of Skin Disease.*

This little work is an abbreviation of large treatises on skin diseases. The description of the ordinary skin diseases, their diagnosis and treatment are given with moderate fullness, but the etiology, and pathological anatomy are mostly omitted. All subjects are treated alphabetically. The author is a skilled dermatologist, and is capable of better work than that of a compiler. The book may meet the needs of some, but after all, the work of Duhring is far more satisfactory and should be in every medical library.

Wood's Edition of the Second Volume of Mackenzie on the Diseases of the Throat and Nose.†

Blakiston's edition of this work we noticed in a late number of the *DETROIT LANCET*. The edition before us differs only in the mechanical execution of the work. The work should find a place in every library.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Nervous Diseases.

THE CAUSE OF HYPERÆSTHESIA OF THE BRAIN.—Dr. J. T. Searcy (*Jour. Inebriety*), in a paper exhibiting the relations between hyperæsthesia as a condition and cause of inebriety, gives the following causes of brain hyperæsthesia:

1. Over brain work—adjusting work—has

*THE LOCK-JAW OF INFANTS, ITS HISTORY, CAUSE, Prevention and Cure. By J. F. Hartigan, M. D. New York: Bermingham & Co., 1884. Cloth, pp. 128. Price, 75 cents. For sale by John Macfarlane, Detroit, Mich.

†A MANUAL OF OBSTETRICS. By Edward L. Partridge, M. D. With sixty illustrations. New York: Wm. Wood & Co., 1884. Cloth, pp. 295. For sale by John Macfarlane, Detroit. Price, \$1.00.

*HAND-BOOK OF THE DIAGNOSIS AND TREATMENT of Skin Diseases, by Arthur Van Harlingen, M. D. Philadelphia: P. Blakiston, Son & Co. 1884. Cloth, pp. 282. For sale by John Macfarlane, Detroit, Mich.

†A MANUAL OF DISEASES OF THE THROAT AND NOSE, including the Pharynx, Larynx, Esophagus, Nose, and Naso-Pharynx. By Morell Mackenzie, M. D. Vol. II.—Diseases of the Esophagus, Nose, and Naso-Pharynx. New York: Wm. Wood & Co., 1884. Cloth, pp. 400. Sold only by subscription to Wood's Library of Standard Medical Authors.

long been set down as a cause of all kinds of brain failures. I think as a cause it has been much over-estimated. Tested accurately, we would find over-work of the brain about as often produces brain injury as over-work of the muscles produces muscle injury. When over-work does injure, I think there is already existing brain defect, and for the real cause we have to go back farther. The natural disintegrating processes that produce the feeling of brain tire and fatigue are a barrier to excess in this direction, in the same way as muscle tire; and dangerous excess, so as to induce a permanency of the condition, seldom obtains. Straightforward, direct, simple brain effort is seldom a cause of permanent hyperæsthesia.

2. I mention worry as a cause of hyperæsthesia. I define worry to be "brain effort sense" of inability to adjust to external surroundings. Worry, therefore, occupies in external adjustments a parallel position to pain in internal adjustments. Continued worry leaves the brain hyperæsthetic in proportion to its lack of tone, or want of nutritive, recuperative, reintegrating power. And the condition continues a longer or shorter period according to the lack of this capacity to recuperate.

3. Continued pain is a cause of hyperæsthesia. Any kind of disintegrating action in the periphery sends disintegrating action to the brain, and the receptive action, excessively disintegrating, is, or makes, pain. I need only appeal to your experience to illustrate this. A person a long time pained is hyperæsthetic; he exhibits the symptoms described even after the removal of the cause of his pain.

4. The continued use of hypoæsthetic drugs is the cause of hyperæsthesia in a brain originally normal. Hence, after this state has been once established, its subject finds a strong temptation to continue taking these drugs because they allay the discomfort of this hyperæsthesia. Hence opium, alcohol, etc., come to exert a controlling influence over a man's life.

Gynæcology.

MUNDE ON THE TREATMENT OF UTERINE CANCER.—Dr. P. F. Munde (*New York Medical News*) gives the results of his studies of this subject. As will be noted his views are diametrically opposed to those of Dr. A. R. Jackson, of Chicago. They are as follows:

1. The disease should be limited to the

uterus and absolutely free from the parametrium. Of course the disease must extend above the level of the vaginal vault and be ineradicable by simple amputation or excision. If the finger in the vagina or rectum detects the slightest infiltration of the glands, lymphatic vessels or cellular tissue, or the microscope reveals doubtful cellular formations in sections of the mucous membrane removed from the vaginal vault, complete extirpation should be abandoned.

2. Cancer of the cervix extending up the cervical canal to a height, the precise limit of which is doubtful, thereby rendering the probability of complete removal of the disease by high supra-vaginal amputation and cautery extremely questionable.

3. Cancer or sarcoma of the body of the uterus. Schroder's method of intraperitoneal amputation of the corpus uteri might be substituted (seven operations with two deaths; no recurrence within two and a half to five years in four cases, or 80 per cent.). The fifth case could not be traced.

4. Perfect freedom of motion of the uterus, so that the uterus can easily be drawn down to the vulva by traction on the cervix, and can be moved in every direction. This condition I regard as indispensable.

5. A capacious vagina, permitting ready exposure of the cervix and vaginal vault throughout, and easy manipulation of ligatures and instruments. Section of the perineum should be admissible for the purpose only when a narrow vagina is the sole obstacle to a successful operation.

6. A sufficiently vigorous condition of the general system, such as absence of serious organic diseases of other organs, as to permit the patient to stand the shock, which, as a rule, is very much less than the gravity of the operation would lead one to expect. Cachexia, if present, would denote such progress of the local disease as to contraindicate the operation.

Otology.

MUMPS AS A CAUSE OF SUDDEN DEAFNESS.—Disease of the ear during the progress of acute infectious disorders is not of infrequent occurrence. Especially are suppurative inflammations of the middle ears common during the progress of scarlet fever, and non-suppurative inflammations are a frequent attendant upon the progress of measles. The nature and treatment of these ear diseases

are well understood. But occasionally during the progress of mumps a sudden and complete loss of hearing occurs which is not so well known, either as to its nature or its treatment, and a paper on the subject from the pen of Dr. Leartus Connor, of Detroit, which appears in the October number of the *American Journal of the Medical Sciences*, is both timely and instructive.

As the result of his personal experience and of the study of thirty-three recorded cases, Dr. Connor concludes that:

1. Mumps do in some rare cases produce complete deafness.
2. This deafness is usually attended with all the evidences of disease of the labyrinth.
3. These show that it sometimes begins in the cochlea, but more frequently in the semi-circular canals.
4. Owing to the lack of early observations and treatment, it is impossible to say that it is not transmitted through the middle ear from the parotids to the labyrinth.
5. The history of some of the cases would seem to suggest that such an origin was possible.
6. This possibility renders it very important that every case of deafness during an attack of mumps be at once carefully examined, so as to settle the question.
7. This possibility offers the only hope for the successful treatment of these cases so as to prevent deafness. Thus, if there be a middle ear disease, we might hope that revulsive and counter-irritant treatment would arrest the disease and save the labyrinth.
8. As to treatment of the labyrinthine disease nothing has thus far been devised that has produced any satisfactory result.

SUBJECTIVE SOUNDS; THEIR DIFFERENT KINDS AND THEIR TREATMENT.—Dr. Woaks (*Brit. Med. Jour.*, Sept.), discusses this subject under the head of subjective and objective tinnitus. Subjective sounds he divides into four classes:

1. Tinnitus originating in the labyrinth, (a) referable to changes in the circulation; (b) from changes in the intra labyrinthine fluid produced from without; (c) exostosis of internal auditory canal.
2. Tinnitus originating in the cavum tympani and eustachian tubes; referable to, (a) presence of fluid; (b) to congestion; (c) to suppurative catarrh; (d) to atrophic catarrh; (e) to movements of the drum head upon the ossicles, especially if these are fixed.
3. Tinnitus having an extramural origin—

general anæmia; aneurism; intra cranial tumors. He gives the character of the sounds pertaining to each of the above causes and his reasons for so assigning them

Dr. L. de Lacharriere follows by a study of the character of the sensations, dividing them into certain types. In the first type the subject of sensations might be compared to the noise heard by applying to the ear a large shell or drum, or the far distant noise of a carriage. The second type might be compared to the noise of the wind among the leaves, sometimes as loud as the roar of a torrent. The third type was characterized by its musical sonorousness. There was also a fourth type, vascular *bruits*, characterized by being often isochronous with the pulse. These typical sensations allowed of a certain classification. The noises of the first types were always observed in occlusion of the auditory canal and eustachian tubes. Those of the second variety were produced by pressure of the labyrinthine fluid without any special lesion of the internal ear. Musical sounds were an expression of a specially morbid condition of the labyrinth. Vascular morbid pulsations might cause *bruits* in different parts of the auditory apparatus.

Ophthalmology.

SUDDEN LOSS OF VISION FOLLOWING ANÆSTHESIA OF THE FIFTH NERVE.—The following case is worthy of study. Dr. G. B. Massey (*Jour. Nerv. and Mental Diseases*, July, 1884) reports the following:

A farmer, forty years old, muscular, well developed, healthy, married three years ago, no history of any venereal trouble, not a hard drinker, subject to headache, great user of tobacco, three years ago was stung on the left cheek by a bee. He was surprised that it did not pain him. Gradually he noticed that the left side of his face became quite numb. For two years this numbness increased, and at times was accompanied by heaviness and pain felt mostly on the left side of the head, though occasionally it extended over the entire head. At the end of two years he noticed an impairment of the sight of the left eye. This impairment rapidly grew worse, so that in ten days he could not perceive light. Dr. William Thomson now examined him. He found vision of the right eye perfect. The left eye was blind and diverged. Both pupils were small and immovable. Inspection otherwise normal. Tension normal, no glau-

coma, the third pair not involved, has adduction when the right eye is closed. The divergence is not due to paralysis of the internal rectus muscle. Ophthalmoscopic examination of the left eye showed white atrophy, the disc being snow white. A year subsequently there was found over the left eye a partially anæsthetic spot, four centimetres long by three wide. The anæsthesia was greatest at the centre of the spot, diminishing as the periphery of the area was approached. Sensation to the faradic current was lessened. The local galvanic sensations presented a decided deviation from the normal. The sensation of tingling was about two-thirds lessened. Vertigo was readily produced with the poles placed anywhere except in the anæsthetic area, where thirty-five cells were required, while but twelve sufficed for the opposite side of the head. No sensations of light could be produced in either eye by the strongest current within the endurance of the patient. The difference of results on the two sides could only be explained by placing these phenomena in the already large list of reflex actions, the integrity of one side of the arc in this case being impaired with a corresponding impairment of the phenomena.

TRANSPLANTATION OF THE RABBIT'S CONJUNCTIVA, WOLFE'S METHOD.—While this is known to ophthalmologists as an old procedure, Wolfe having operated a dozen years ago, it will be of interest to others, especially as he has been remarkably successful. We quote from a reprint of articles published in the *Practitioner* and *Brit. Med. Jour.*:

"The patient is put under chloroform, and also at the same time two rabbits, one being kept in reserve in case of accident—I find the grey wild rabbit more suitable than either the white or black; the conjunctiva in it is tougher and stronger, and stands handling better. I then separate the adhesions so that the eyeballs can move in every direction. If necessary, I then enlarge the external palpebral opening of the rabbit so as to enable me to evert the lid better for dissection. Ligatures are then introduced into the conjunctiva of the rabbit to mark the extent of the membrane to be removed; by means of the ligature it is put on the stretch and dissected with the strabismus scissors. The membrane is spread out on the back of my hand and left to dry there while I finish the preparation of the part for its reception. The flap is cleaned and trimmed, after which it is slightly moistened and then removed to its

new site. It is now at once stitched to the free border of the lid, which is at the same time strongly everted, spread out carefully and secured at the cul-de-sac. I generally find eight ligatures sufficient to keep the transplanted membrane in its place. The ligatures are left in for four or five days before they are removed. I attach great importance to putting the flap down in such a way that there can be no mistake as to which is the epithelial surface, and so there is no curling or twisting.

TRANSPLANTATION OF SKIN FLAPS TO THE EYELID, WOLFE'S METHOD.—In a report from the *Brit. Med. Jour.*, Dr. Wolfe gives his method of transplanting large pieces of skin without a pedicle, to the eyelid from the arm. He says the flap must be freed from all areolar tissue and properly fixed in its new place. The shape and size of the skin required must be carefully cut out in lint. The piece of lint is then laid on the forearm which is in a state of semi-supination, and the shape traced by the point of a knife making it larger all around to allow for shrinking.

To remove the subcutaneous tissue he spreads the flap out on the forefinger and snips it off with a sharp scissors. Then he dips it into tepid water and dries it properly. When possible, he dissects up the edge of the skin about the denuded spot, and placing the flap in position tucks the edges of the flap under the dissected edges. Having been properly moulded in its new place, lint soaked in hot water is held on it for five minutes and then a few other pieces of lint, wrung out in hot water, are laid upon the new flap and the whole covered and secured by an immovable bandage. The head should be kept steady and warm, the patient in bed, well covered, and supplied with warm drinks to keep up the temperature of the body. For three days the dressing is not to be removed, then it should be carefully done, the last layer of lint being soaked in hot water, so that it may be taken up without dragging the flap. It may then be dressed every twenty-four hours. The lids should not be severed for at least six weeks.

PECULIAR CASE OF SYMPATHETIC OPHTHALMIA.—Dr. M. Landesberg (*N. Y. Med. Jour.*, Oct. 18, 1884), reports a remarkable case, of which the following is an abstract:

A foreign body penetrates the eyeball, causing traumatic cataract and consequent morbid changes in the uveal tract and retina. The

lens is absorbed, and a thick opaque membrane (secondary cataract) obstructs the whole capillary field. The foreign body remains embedded in the posterior surface of the other end of this membrane for nine months, without doing any harm. Then the right eye begins to show symptoms of sympathetic trouble. Amblyopia and paralysis of the muscle of accommodation develop. And, while these morbid changes of the most serious character take place, no inflammation proper, no objective irritation, can be observed in either eye. The injurious influences, which have continued for two years, are checked at once by the removal of the foreign body. The secondarily affected eye makes a marvellous recovery, which far surpasses all hopes and expectations. Such a vision as 12-8 is only met with in very rare instances, and the primary injured eye, which was not considered worth preserving, improves to such a degree as to enable the patient, should he have the misfortune to lose his right eye, to find his way in the streets, to recognize faces, to distinguish features, and eventually to gain a living by peddling, etc., if need be.

PREVENTION OF OPHTHALMIC NEONATORUM.—One of the greatest blessings which medical art of late has conferred on mankind is the preventive treatment of the blenorrhœa of the eyes of new-born children. In the October number of *The American Journal of the Medical Sciences* Dr. Henry J. Garrigues calls attention to the value of Credé's method of treatment, which in brief consists in washing the outer surface of the eyelids with plain water, separating them slightly and letting a single drop of a two per cent. solution of nitrate of silver fall from a glass-rod on the cornea. No after-treatment is used.

In 1882 Garrigues introduced Credé's treatment into his service at the New York Maternity Hospital, since which time 351 children have been thus treated and not a single one was affected. He makes this application immediately after the cord has been severed, which is not done before the pulsation in it has ceased. During the subsequent ablution great care is taken that no foreign substance enters the eyes.

The results obtained in lying-in hospitals by this method are so striking that there cannot be any doubt about the advisability, nay, the duty of adopting it in all such institutions.

Practice of Medicine.

BRIGHT'S DISEASE OF MALARIAL ORIGIN.

—Dr. I. E. Atkinson, of the University of Maryland, believing that this subject has not attracted the attention it deserves, has been led to study with reference to it all cases of malarial fever coming under his observation during the late summer and early fall of the past two years, at Bayview Asylum, and the results he gives in an able and elaborate paper which appears in the July number of the *American Journal of the Medical Sciences*. The conclusions which he reaches are as follows :

1. Transitory albuminuria is not uncommon in the course of malarial fevers, and is due to the intense visceral congestions characteristic of these affections. It may only endure throughout the height of the congestion, recurring with each return of this, or it may persist in the intervals, in which event a higher grade of congestion is attained, more nearly approaching a condition of acute inflammation.

2. In a proportion of cases varying with locality and type of prevailing epidemic, or individual conditions, inflammation of the kidney occurs, accompanied by dropsy and the usual symptoms of nephritis.

3. The usual form of malarial nephritis is the tubal and diffuse variety. In this the inflammation seems to be most intense in the vicinity of the glomeruli.

4. Contracted kidney may occur as an advanced stage of malarial nephritis either from long-continued or frequently repeated attacks of malarial fever, or from fibrotic changes such as may ultimately occur in ordinary tubal or diffuse nephritis. It is altogether improbable that this form of malarial renal disease ever occurs primarily as purely intestinal nephritis.

5. These changes may be induced by any form of malarial fever, though they more commonly follow chronic intermittent fever.

6. The tendency of malarial inflammation of the kidney is towards recovery. But from the persistence of the impaludism or the intensity of the inflammation, structural changes may be produced that are characteristic of chronic Bright's disease, when the gravity of the affection will be as that from chronic Bright's disease from whatever cause.

7. Treatment should be directed primarily against the malarial intoxication, more especially in recent cases. A correction of this will often be followed by a complete, though often

gradual, subsidence of the nephritis. Even in more chronic cases, the malarial factor in the process should definitely be destroyed if possible, after which the disease should be treated as ordinary Bright's disease.

A CONTRIBUTION TO THE CLINICAL STUDY OF RÖTHELN OR GERMAN MEASLES.—It appears to be a somewhat general opinion that Rötheln, or, as it is not infrequently called, German measles, is a disease of such minor importance as to be unworthy of scientific research; but a disease, the victims of which succumb as early as the fourth day, must be of sufficient importance to demand our attention and the best efforts of our armamentarium.

Dr. W. A. Edwards, during the winter and spring of 1881-2, studied in the Philadelphia Hospital over one hundred cases of the disease, and the results of his observation he details in a valuable clinical paper in the October number of *The American Journal of the Medical Sciences*.

As regards the diagnosis, he says the eruption appearing on the third day first in the face, its rapid extension, its gradual shading off into the surrounding skin, its elevation, more particularly in the centre of the patch, which is also the brightest in color, together with the fact that desquamation first shows itself there, are all points which, as far as the eruption is concerned, render the diagnosis plain; furthermore, the rash almost at once occupied the whole body, and never presented a crescentic outline. The extreme drowsiness during the eruptive stage is a symptom upon which Cheadle lays some stress. It is Dr. J. M. Keating's experience that, however severe the attack may be or however diffused the eruption, the contour of the face is never lost, and that by looking properly you can always see the zygomatic arch; this, he observes, is always obliterated in cases of either measles or scarlatina that are severe in character. Sore throat was always present; in scarlatina it is directly in proportion to the type and severity of the disease; the more laryngeal character of the cough in rötheln propagates itself, and never gives rise to either measles or scarlatina, and, moreover, does not protect from these diseases, in a further diagnostic point that should claim our attention.

Dr. Edwards highly recommends the application of oleaginous preparations to the skin during the stages of eruption and desquamation; in the former stage for the comfort

of the patient, and to allay itching and aid in the reduction of the temperature; in the latter, to prevent contagion, as all of his cases underwent desquamation, and in all probability the contagion is carried by these fine scales.

ON MUSCULAR HYPERTROPHY OF THE STOMACH.—Concerning this rare condition of the stomach there appears to be but little known, and it is not generally mentioned by writers on diseases of this organ, therefore the careful report of the case by Drs. Alex. Marcy, jr., and J. H. Crozier Griffith, of Philadelphia, which appears in the *American Journal of the Medical Sciences* for July, 1884, has a special value. Unfortunately, the disease is rather of pathological than clinical interest, since there are no symptoms which are as yet known to be peculiar to it, and the treatment can only be palliative.

SAND IN DYSPEPSIA.—*London Medical Record.*—The most fantastic forms of treatment are sure to find some disciples. According to the *New York Medical Record*, Dr. Kerlus thinks that fine sand may be advantageously mixed with food. Herbivorous animals eat dust and mud, which make the food less heavy, and birds often swallow sand. Consequently Dr. Kerlus gives sand to his dyspeptic patients, who appear to derive benefit from it.

ACUTE YELLOW ATROPHY, RED ATROPHY, AND HYPERTROPIC CIRRHOSIS OF THE LIVER.—In a study of a number of cases of these diseases, Dr. J. H. Musser, of Philadelphia, in the July number of the *American Journal of the Medical Sciences*, seeks to determine whether the degenerative changes are primary, or secondary to an inflammatory process.

Surgery.

A CASE OF SUBSCAPULAR ABSCESS.—Dr. Albert N. Blodget, of Boston, narrates in the October number of the *American Journal of the Medical Sciences* a very instructive case of this rare affection, and it is believed to be the sixth on record.

The peculiar anatomical relations existing around and beneath the scapula give to an acute inflammation, and to the results of such an inflammation in this region a degree of importance to which they would otherwise be in no way entitled. The broad flattened cos-

tal surface of the shoulder-blade offers an unyielding barrier to the products of inflammation, the swelling, effusion, the slough of tissue, or the subsequent suppuration. The margins of the scapula are occupied by the insertion of numerous powerful muscles, or are fringed with dense and tense fascia, which, though allowing a moderate displacement by the pressure from within, yet are grave obstructions to the relief of a deep-seated abscess by the process of natural evacuation. It will be remembered that the fascia of the neck plays a similar part in the history of deep carbuncle of this region; and to it may probably be ascribed in great measure the grave character and frequently the fatal issue in this affection. Thus we see that an acute inflammation in the tissues beneath the scapula is accompanied by conditions which can be likened only to those confined to, and found in three other parts of the body, viz: to the interior of the skull; to the sheaths of tendons, particularly those of the digital flexors; and to the roots of the teeth within the alveolar process. The course of the disease in its progress toward spontaneous cure, in the patient whose history forms the foundation of this article, illustrates the truth of this comparison in an indisputable manner.

The study of Dr. Blodgett's case is interesting for the following reasons: 1. The occurrence of an acute inflammation in a confined locality, to which it is restrained by an overlying surface of bone which cannot yield to pressure, without causing necrosis, exfoliation, or perforation of the bone. 2. The absence of injury to the vertebræ, which lie in dangerous proximity to the seat of disease. 3. Absence of caries or necrosis of the ribs, which formed one wall of the suppurating cavity. 4. And most surprising of all, the evacuation of the purulent fluid through a false channel, of comparatively very great length, by means of localized peritonitis and adhesive inflammation of the abdominal viscera, and perforation of two layers of peritoneum, and the wall of the intestine, without the occurrence of fatal peritonitis, or of septicæmia, or any other serious complications; and 5. Finally, the existence of a tense abscess in a confined locality upon the chest-wall, with the formation of a long sinus in the space between adjacent ribs, without a perforation of the parietal pleura, and the occurrence of a traumatic empyæma; or adhesive inflammation of the opposed pleural surfaces and perforation into the pulmonary

structure, with rupture into a bloodvessel or into a bronchus.

When it is possible to establish the diagnosis of subscapular abscess at an early period in the disease, the surgeon would certainly feel that operative interference for the purpose of affording an outlet for the products of inflammation would be not only justifiable, but an imperative duty. The diagnosis may not be easy, and in the case here narrated the true nature of the disease was not recognized by the attending surgeon; but when the presence of pus beneath the shoulder-blade is once determined, no time should be lost in providing a path for its evacuation.

OPERATIVE INTERFERENCE IN GUNSHOT WOUNDS OF THE ABDOMEN.—Dr. Chas. T. Parkes (*Med. News*) made this the subject of his address in the surgical section of the American Medical Association. He concluded his admirable and well prepared paper—which was illustrated by numerous experiments on animals—as follows:

1. Hemorrhage following gunshot wounds of the abdomen and the intestines, is very often so severe that it cannot be controlled without abdominal section; it is *always* sufficient in amount to endanger life by secondary septic decomposition, which cannot be avoided in any other way than by the same treatment.

2. Extravasations of the contents of the bowels, after shot injuries thereof, are as certain as the existence of the wound.

3. No reliable inference as to the course of a bullet can be made from the position of the wounds of entrance and exit.

4. The wounds of entrance and exit of the bullet *should not be disturbed* in any manner, except to control bleeding, or remove foreign bodies when present. They need only to be covered by the general antiseptic dressing applied to the abdomen.

5. Several perforations of the intestine, close together, require a single resection, including all the openings. Wounds destroying the mesenteric surface of the bowel always require resection.

6. The best means of uniting the wounded intestine after resection is by the use of fine silk thread, after Lembert's method. It must include at least one-third of an inch of bowel tissue, passing through only the peritoneal and muscular coats. The everted mucous membrane must be carefully inverted, and needs no other treatment.

7. Wounds of the stomach, small perforations and abrasions of the intestine, can be safely trusted to the continued catgut suture.

8. Every bleeding point must be ligated or cauterized, and especial care devoted to securing an absolutely clean cavity.

9. The best method of treating the stumps of divided mesentery is to secure them to the intestine at the site of the resection, or, better, to leave the mesenteric surface of the bowel as indicated above. Still, this requires further study.

10. *Primary abdominal section* in the mid-line gives the best command over the damage done, and furnishes the most feasible opening through which the proper surgical treatment of such damage can be instituted. Further, its adoption adds but little, if anything, to the peril of the injury.

11. Is not the moral effect of the assurance to the patient, that he will be placed in condition most likely to lead to his recovery, a good substitute for the mental depression accompanying the general and popular conviction that his wounds mean certain death?

A CASE OF LEFT INGUINAL COLOTOMY FOR IMPERFORATE RECTUM.—Dr. W. H. Haynes, of New York, records in the July number of the *American Journal of the Medical Sciences* an interesting case of inguinal colotomy. One procedure in the treatment we do not find discussed elsewhere in detail, namely, that of opening up a passage at the natural site for the canal, either simultaneously or subsequent to the operation of opening the gut. When the two operations are to be performed at the same time, the first or inguinal opening would be in the nature of an exploratory operation, and should be made small so as to admit of immediate closure, and return to the peritoneal cavity after a passage had been secured at the natural site. If this latter be not secured, then the opening could be enlarged and made to serve the purpose of an artificial anus in the abdominal wall. The advisability of this procedure, however, is at present in such a doubtful state, that only the experience of a number of operators can determine it. Of the few cases so far undertaken in this manner that Dr. Haynes can find recorded, his own is the only one that survived the second operation.

Dr. Haynes's single experience, though successful, does not lead him to advise this procedure, since the object of it will, during

the early years of its life, be dependent on the exceedingly diligent and constant attentions of others whose affections and services, though the closest, are not to be depended on, as was demonstrated in his case. If the second operation be subsequent to the first, the patient will have a double annoyance, or be under the necessity of having a third operation performed for the closure of the opening first made, which is not unattended by danger to life or by doubts as to the result; and perhaps be under the necessity of having to have it reopened, owing to neglect in the proper after-treatment of the new canal in the natural site. Whereas if one is satisfied with having saved life in a manner which numerous cases testify is not unenjoyable or full of discomfort, as used to be maintained, all dangerous risks of subsequent operations are avoided, there will be no more dependence on other's services than is natural, and many sources of distress that natural flesh is heir to will be obviated.

THE OPERATIVE TREATMENT OF PURULENT PLEURAL EFFUSIONS.—Drs. E. T. Bruen and J. Wm. White (*Med. News*) read a paper on the above subject at the meeting of the American Medical Association, and concluded about as follows:

The formation of purulent effusions is dependent on lowered vitality, scrofulous diathesis, and intercurrent disease.

The diagnosis can only be made certainly by puncture and inspection of the fluid.

In children one or two aspirations will often suffice for a cure.

The openings should always be made so as to give thorough drainage.

Where it is indicated certain portions of the ribs may be removed to facilitate further expansion of the lung.

A CASE IN WHICH FOUR INCHES OF THE SHAFT OF THE FEMUR WERE LOST BY NECROSIS, WITH COMPLETE RECOVERY.—Dr. John Ferguson, of Toronto, reports this very interesting case in the July number of the *American Journal of the Medical Sciences*. Upon the removal of the sequestrum, which embraced the whole diameter of the femur, a thin shell of newly-formed bone was left, and the steps of repair advanced until the femur was completely reformed without shortening. An expectant and tonic plan of treatment was adopted throughout.

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Original Communications.

Neuromata of the Female Urethra.

A PAPER READ BEFORE THE WAYNE COUNTY MEDICAL SOCIETY BY C. HENRI LEONARD, M. D., PROFESSOR OF MEDICAL AND SURGICAL DISEASES OF WOMEN AT THE MICHIGAN COLLEGE OF MEDICINE, DETROIT.

THE disease that I have to report to you this evening is one of not very frequent occurrence; is somewhat insignificant as regards the size of the growth, though one that gives intense pain and prolonged suffering to the patient. It is a growth that seems to attack the female urethra alone, at least so far as my observation goes, but of the pathology or histology of the tumor I shall speak farther on.

Case History.—Miss E. D., from Ontario, presented herself at my office on the 1st of November, asking for my opinion of her case. The history that she gave was as follows: For some two years she had suffered greatly every time she was compelled to pass her water; this trouble had been gradually culminating in its intensity until now it was almost unbearable. The tenesmus would sometimes last for several hours after an attempt, during which time she would be fairly wild with agony. Walking was difficult for her, especially if she wished to go any considerable distance. After being long on her feet, the same pain would ensue as after passing water, and she would be compelled to lie down in order to get any relief from it, a singular point being, that after lying down long the pain would become as unbearable as when continually on her feet.

Mornings she was always worse than at night; that is, there was necessarily a continual change of position in order to mitigate the intense pain from which she was suffering. Walking was further painful from the friction of the labia against the "sore place," as she expressed it. Excessive pain was always set up when her bowels moved. Horse back riding she had been compelled to forego,

though extremely fond of it, owing to the pain it caused her. In fact, life was becoming fast intolerable to her from the pain that she was continually enduring. She had been constantly doctoring, but with little or no benefit; medicines applied to the parts gave little or no relief, and could be only imperfectly applied, owing to the new pain that they gave; those administered by the mouth only gave relief as they contained more or less of anodynes.

She had been imperfectly examined, but nothing definite had been learned, as any attempt to arrive at a thorough understanding of her case by local examination only threw her into paroxysms of intense pain.

The above was, in brief, the history of her case as learned from her and from her friends. Though enquiring especially concerning the symptom of hæmorrhage, as this is a frequent accompaniment of these vascular tumors of the urethra, in fact, one of the urgent—from the excessive loss of blood—symptoms calling for immediate relief, yet I could get no such history, probably because it had not passed to the hæmorrhagic stage; yet it was of sufficiently long duration to have given this trouble, had it not been of a little denser structure than some of the tumors that I have seen of similar character.

On attempting an examination at my office, I was completely foiled from the spasm of the vagina—vaginismus—that would be set up, and not vaginismus alone, but a complete and forcible closing of the vulva as well by the firm contraction of the labia and inner thighs, the patient fairly writhing with pain. I sent her to the Michigan College of Medicine hospital, and the next morning completed the examination under chloroform. I must say that I never saw a patient so slow in coming under the full influence of the anæsthetic; when her eye showed complete loss of sensation, the slightest touch at the labial commissure would induce a forcible contraction of the tri-form muscle of the vagina, as well as the *compressor bulbi vaginae*.

As a case showing me the action of the *pubo-coccygeus* muscle—a part of the tri-form muscle—in closing the vaginal passage as a

sphincter, it was the finest I had ever seen. The *compressor bulbi vaginae* muscle has nothing whatever to do with the closure of the vaginal canal, as our works on anatomy plate, and this case absolutely proved this assertion. The vaginal sphincter—the *pubo-coccygæus*—was showing its action fully one-half of an inch farther up the genital passage than is the anatomical placement of the sphincter of the vulva—the *compressor bulbi vaginae* muscle—and which is said to be the sphincter of the vagina by both Wilson and Gray. The former acts *behind* the pubis, the latter *in front* of it; the former is the sphincter of the vagina, the latter the sphincter—partial, for it does not close the vulva entirely—of the vulva. It also serves, when it contracts, to expel the contents of the vulvo-vaginal—Bartholine's—gland, thus keeping the parts well lubricated during sexual intercourse, as well as when exposed to the friction from exercise. The tri-form muscle—made up of the *pubo-coccygæus*, the *obturato-coccygæus*, and the *ischio-coccygæus* muscles—also showed itself as the *expelling* muscle of the vagina and the lower part of the rectum as well. Its range of influence extended from just back of the vulvar commissure, or back of the pubes, up the vaginal tract, and lower rectum as well, to the distance of nearly full two inches. It is the contraction of this muscle that aids very materially in the expulsion of the child during the latter stage of labor. I have given this group of muscles the name of “tri-form” in my *Vest Pocket Anatomist*, and which in the male is represented by the single muscle, “levator ani.” They are hard to separate one from the other, either anatomically, or in their physiological action, hence I class them together under this term, “triform.”

When full anæsthesia had been acquired, a forcible separation of the labia showed a small, dark-red growth, about the size and color of a barberry, protruding from the meatus urinarius; its long axis was directed somewhat upwards. On dilating the urethra, its attachment was seen to be along the lower surface of the urethral mucous membrane for a distance of three-quarters of an inch. Indeed, it has been my experience with all these neuromata of the female urethra to find them with sessile attachments; and the frequent speedy return of these growths after removal is to be attributed to the fact that the *whole* of the sessile attachment has not been removed or destroyed. I have seen, in one case, the attachment to spring from the very neck of the bladder, so far up did its sessile

attachment extend. Unless the *whole* of this proliferating membrane is removed—which *cannot* be done by the usual method of twisting the tumor upon its pedicle—your patient will speedily be in as uncomfortable a state as before your operation.

After keeping the walls of the urethra well expanded, a platinum wire was bent to an acute angle, and this kept at a white heat by a galvano-cautery battery, and carried up to a point beyond the origin of the dark-red and diseased mucous membrane; it was then pressed quite firmly down upon the diseased tissue, and slowly withdrawn. This procedure was repeated three times, or until the tissue had been thoroughly charred down to and within the muscular coat. The charring was also extended over the lower portion of the tubercle of the meatus, as this was of too angry a red color for health. Up to this time there had not been the loss of a single drop of blood, when ordinarily the bleeding from these little growths is *very* profuse; I have had them, in order to stay the profuse flow, call for the packing of the canal with cotton pledgets in which the dry persulphate of iron is enmeshed, where I have cut them off from the urethra with scissors and knife, and then tried to cauterize with a *thermo-cautery* afterwards.

After I had finished with the platinum cautery-wire, I introduced a pair of heavy uterine dilators into the urethra to the bladder's neck, and then forcibly dilated the urethra to a distance of one inch, antero-posteriorly. This caused a slight flow of blood, but not to exceed two teaspoonfuls. The dilating of the urethra was done to relieve the tenesmus, or spasm, that usually ensues after operations on these growths. As this is a point not spoken of by authors, and I have made operations both with and without this forcible dilation, I would specially recommend its adoption in *all* similar cases; it certainly depletes the congested vessels about the meatus, and also prevents any blood-stasis incident to the swelling after the operation. It also saves the necessity of drawing the patient's water with a catheter, as is frequently, though not always, demanded when this forcible dilation has not been made. I have a notion, also, that it is a curative agent as well. If forcible dilation of the anus and lower rectum will cure external piles and anal fissures, as is now advocated, then forcible dilation of the urethra will tend to permanently relieve the nipped blood-vessels—and

so dilated—about the meatus in this class of cases.

The patient was put to bed with no dressing but carbolized vaseline. No anodyne was given, either then, or at any subsequent time during the healing of the charred surfaces, for there was an almost nihility of pain. Indeed, I have been surprised at the small amount of pain experienced by a patient after the galvano-cautery has been used. I have employed it in quite a range of cases, as prolapsus of the rectum, when the protruding mass has been sphacellated; external hæmorrhoids; fibroma of the vulva, cutting off most of one labium majus, and a part of the labia minora; in an osteo-sarcoma of the upper jaw; carcinoma of the lower jaw and tongue; carcinoma of the tongue of a child, etc. And the universal testimony has been a noticeable absence of after-pain. Even at the time of operation the pain is not nearly so severe as it would look to be, for in the operations for cure of prolapsed rectum—and it was a radical cure—and one for very large external piles, no anæsthetic was used.

The entire after-treatment of my case consisted in washing the vulva with carbolized water, the day the slough came away (the third), and the application of a cotton pledget smeared with carbolized vaseline. For three or four days after the slough separated, there was a slight oozing of blood after each micturition, but not enough to call for any attention. There was also a slight scalding at the time, owing to the passing of the urine over a granulating surface; still, at no time was there the same amount of irritation following the passing of the water, as had marked other cases where the caustic wire had not been used. There was also a complete absence of the tenesmus that had previously made each attempt at micturition so excessively painful.

On the tenth day after the operation, an examination was made of the parts, and there was only a little redness, marking the tract of the cautery, remaining. The vaginismus that she had previously had at each attempt of examination of the vulva, was also absent, though the patient shrank a little, fearing that the old pain would be induced. She left for home on this date.

In comparing the results of this case with those where I had operated by twisting the tumor upon its pedicle, with those where I had cut it from its sessile base with scissors, then applied the thermocautery and dry per-

sulphate of iron to staunch the very free hæmorrhage, I have been so much struck with the advantages to be obtained with the use of the galvano-caustic wire as to recommend its *exclusive* use in operating upon these troublesome little tumors.

The Pathology of the Growth.—The name to the heading of this paper will tell you, in brief, what I regard as its chief pathological elements. The sensation to the touch, as described by patients is very nearly the same as that experienced when a tooth-nerve is exposed and touched with a hard substance. Who can blame a patient's wincing, knowing this is the sensation they are experiencing every touch that you give the rebellious little growth?

There is no other way to account for the excessive pain that these growths give—for they are insignificant as regards their size—than by this nerve hypothesis. In each of the cases falling under my notice, the pain has fairly made life miserable for the possessor. Thomas, in his work on Diseases of Women, states that he was informed by Dr. T. F. Cock, that one of his patients took her life in order to be free from her sufferings; he also adds that he, Thomas, knows of another similar instance. Simpson, in his work upon The Diseases of Women, narrates this case: "I was told by a shepherd's wife, who had one of these sensitive carunculæ, that whenever she was obliged to pass her water she was in the habit of going to some distance away from her cottage, in order that she might moan and scream unheard, and so not distress her family with the sound of her cries, so intense and intolerable was her suffering."

The genitalia of the female are also endowed with greater nervous sensibility than are the male's. The clitoris, for instance, though far smaller than its male analogue, is much more freely supplied with nerve elements, in proportion to its size. Then, too, the whole vestibular portion of the female, with the urethral tubercle, is of high nervous organization, being in part, the seat of sexual nervous impression, hence the anatomical reason for the development of a neuroma at this point.

As further proof of this position I would add that Dr. John Reed, quite a prominent English microscopist, who has examined these painful growths for Sir J. Y. Simpson, discovered evidences of a "very rich distri-

bution of nervous filaments" prevalent in them.

Another histological element entering largely into the formation of these growths, is "granulation" tissue, a tissue very rich in its profusion of minute blood-vessels, just the same as you see in any granulating tubercle of a richly granulating wound. I have examined the specimen quite carefully that I have cut out, and this, with nerve-filaments, seem to be about all there is of them, plus the simple epithelial elements that went to form the limiting-walls of the blood-capillaries. Wedl, in his *Pathological Histology*, calls these tumors "dendritic, papillary new-formations of connective tissue." Farther on, in commenting especially upon one under examination, he says: "It consisted of a spongy texture of bluish-red color, and exhibited, when cut, cavities containing colloid matter. * * * * The most interesting point was the distribution of the blood-vessels, which could be distinctly traced in the transverse sections moistened with a solution of sugar or common salt. The ramification of the vessels precisely resembled that witnessed in the *vasa vorticosa*. Several considerable sized vessels entering one of the lobules, divided into a multitude of smaller ones, which, though not of capillary dimensions, made numerous undulating curves, extending up to the periphery of the lobule where they terminated in mostly short and abrupt loops." He gives a cut of these loops, and further adds that the walls of these vessels are everywhere simple, like those of capillaries, and that the red blood-corpuscles were of unusually small size within them.

This accounts for the free hæmorrhage that is so frequently observed from the surface of these growths, when pricked or irritated with the friction from the clothing, or from the spasmodic closure of the urethra after micturition; this spasmodic action also increases the hæmorrhage, as it "nips" the base of the pedicle and prevents the free return of the blood through the more superficially placed capillaries, thus increasing the amount of the blood loss.

After operation the loss is excessive in some cases, as I am abundantly able to testify to from personal experience after operating upon one of my patients. Tilt details a case where the loss became absolutely dangerous to life. These are his words: "Some years ago I assisted Dr. H. Bennet to cut a tumor about the size of a large pea from the urethra

of a lady over fifty, and she was afterward left under my care. She lost very little blood, but, nevertheless, got very weak, and although I had to draw the water twice a day, it was only on the fourth day after the operation that it struck me the urine contained a large quantity of blood. Then I saw that blood was oozing out of the cut mucous membrane, and trickled down into the bladder, because the patient was always upon her back." The hæmorrhage was stayed by the free application within the urethra of ferric persulphate. Now, while one swallow does not make a summer, I am quite confident that had the galvano-caustic wire been used, and the urethra fully dilated, as I have advised in this paper, neither the necessity for drawing the water with a catheter, nor the alarming hæmorrhage spoken of, would have resulted.

Causes.—Prominent among them may be mentioned the peculiar anatomy of the female urethra. I am well aware that this is not mentioned by any authority; but from a careful study of the complaint, I am well satisfied that this is the chief cause of the trouble. It also accounts, in great part, for the rarity of the trouble in the male.

The mucous urethral coat of the female is a continuation of the mucous coat of the vulva and vagina, as well as that of the bladder. Its proper analogue in physics would be represented by a strait between two connected larger bodies of water. This mucous membrane of the urethra lies in folds, placed parallel with the long axis; posteriorly there is a larger and more prominent fold, one that has its anatomical analogue in the *veru montanum* of the male.

My experience has always shown the urethral origin of these growths to be in this posterior and more prominent fold; they also spring from the folds about the meatus as well; but here in the meatus we find the same reduplication of the mucous membrane as we find in the urethral channel, resembling somewhat, in its gross appearance, when diseased, the newt's foot, as so aptly suggested by Sir James Simpson.

This lining membrane is not only redundant itself, but is only loosely attached to the muscular coat beneath, hence it slides easily, to a slight degree, upon it. Savage, in his atlas of *The Female Pelvic Organs*, says that the mucous membrane of the urethra covers "a loose, spongy structure supplied by veins, which, though of greater calibre than the

venous canals in the muscular structure, are directly continuous with them. The arteries of supply run within the elastic sheaths of the muscular strands, and their communication with canals resembles exactly that which occurs in the cavernosa of the male." This then being the anatomical structure of the urethra, it follows that if there be much tenesmus from bladder irritation, this posterior fold of the mucous membrane will become, in a measure, slightly strangulated and slipped from its normal muscular bed by this tenesmus. The free venous and arterial communication, resembling closely true erectile tissue, becomes congested, and if this "nipping" of the posterior fold be long enough continued, a hypertrophy, possibly a hyperplasia, of the succulent tissue will result.

As exciting causes there would come into play physical exercise, like continued horse-back riding, when there was or had been bladder trouble; prolonged walking or the lifting of heavy weights at such time; the weakening of the parts by distention during child-birth; over-distension of the urethra to cure bladder tenesmus, or for diagnostic purposes. As the trouble is most frequently seen in old ladies, or in those advanced to middle-age, it would seem that child-bearing was the chief exciting cause. In young unmarried ladies too severe physical exercise should be looked upon as the exciting cause. In my case herein reported, the young lady had been accustomed to frequent and violent exercise upon horse-back, and to this she and her parents attributed her trouble; leastwise her favorite pastime, horse-back riding, was the first thing she had to give up, as it distressed her so.

Prognosis.—As regards immediate fatality, good; as regards relief from suffering, a prompt affirmative may be given; as regards freedom from a recurrence, prognosis should be guarded. If the galvano-caustic wire is used, and a *thorough* destruction of *all* diseased tissues is made, the chances of a return of the complaint are very small; if torsion is employed, as frequently recommended, or the cutting operation alone made, a more or less speedy recurrence may be looked for. The operation, if with the cautery-wire, is comparatively free from danger; the liability of stricture of the urethra is not so great from cauterizing the female urethra as in a similar operation in the urethra of the male; still, this must be held in mind when using the wire, so that you may not burn too deeply.

Sir James Simpson says: "This operation,

let me warn you, however, simple as it may appear, is not always so easy and successful as the descriptions of it, which you will find in books, might lead you to suppose. * *

* * For after simple removal with a ligature, or scissors, they almost invariably grow again." This is undoubtedly due to the fact that with the knife, scissors, or ligature, you do not remove *all* the tissue involved; for besides the tumor itself, you will find, frequently, little dark-red spots that are equally sensitive with the tumor that you may cut away, and unless you remove these, with the larger body, "you will not," as Sir James Simpson avers, "succeed in curing your patient, or in affording her permanent relief."

Exognosis.—The only troubles likely to be confounded with the one under discussion are the prolapse of the urethra, and the painless venous angioma. The former may be readily known by the tumor entirely surrounding the meatus, making it look, as in the aggravated case I recently had, much like the os uteri; besides, there is not near as much pain with the prolapsus. The latter tumor may be known by its comparative freedom from pain, and its larger size.

Treatment.—As indicated already in this paper, for many reasons the galvano-caustic wire is alone to be used. 'I have tried all the various ways herein spoken of, except the ligature, and I am free to say the caustic-wire the only one I would recommend.

Specialists.

PAPER READ BEFORE THE DETROIT ACADEMY OF MEDICINE BY DR. HAL C. WYMAN.

DR. JOHN SMITH, who has just graduated from Hoopemup Medical College, has been advised to locate in the thriving village of Riga, where there are only two old practitioners, who are entirely out of date. The following dialogue ensues when he pays his professional respects to one of these gentlemen soon after taking up his residence in the village:

"Good morning. Is this Dr. Jones I have the pleasure of meeting?

Dr. J.—"It is. Will you be seated?"

Dr. S.—"I have opened an office in this town, Doctor, and am going to see what I can do toward building up a practice. I thought it my duty, as well as a pleasure, to make the acquaintance of my fellow physicians. I do

not expect to do all the business that is done here, but will confine myself to a specialty."

Dr. J.—"I understand. What is your specialty, Doctor?"

Dr. S.—"Gynæcology. I have given a great deal of attention to the subject, have witnessed and performed all the operations, and am well supplied with instruments."

Dr. J.—"So?"

Dr. S.—"Yes. I am fully prepared to operate for lacerated cervix or perineum, and have invented an instrument for kolpokusis."

Dr. J.—"That is remarkable."

Dr. S.—"Any cases of female diseases you may have under your care, I shall be glad to show you a cure. If you will call at my office I shall be pleased to show you my instruments, among them being Prof. Smith's utero-metric bougie *au boue*."

Dr. J.—"Prof. Smith's what?"

Dr. S.—"Utero-metric bougie *au boue*."

Dr. J.—"I see. You mean Prof. Smith's instrument for measuring the uterus."

Dr. S.—"Exactly. It is a very handy instrument. By its aid we can tell whether the uterus is deeper than normal. If it passes in a distance greater than $2\frac{1}{2}$ inches, the chances are that something is wrong with the uterus—some kind of a tumor or chronic inflammation."

"Or pregnancy," said Dr. Jones. "And what then? You would have broken the membrane, and made the way for an abortion, would you not?"

Dr. S.—"Such an event I would hardly look for. I have never seen it occur among the 2,500 examinations I have seen made in the clinic where I studied."

Dr. J.—"But you forget that you saw but very few of these cases a second time, and you do not know what may have happened after the patient left the clinic. Five hundred of those women may have been pregnant two or three months when the measurements were made, and you not have been the wiser for anything you, a student, observed. Now, doctor, the women, young and old, in this neighborhood are raising babies most of the time, whether sick or well, and I would advise you to be very careful how you handle your utero-metric bougie with a ball on the end of it."

Dr. S.—"But, Doctor, there are hundreds of women who are suffering in silence a thousand tortures, whom I can cure with the improvements of modern gynæcology, and you might kill a great many, also. Times have changed since you were a student. When you began practice, Dr.

Deweese cured all his female cases with internal medication, or, at least, he claimed to. His guaiac mixture was a famous remedy in dysmenorrhœa, but who would think of resorting to it now? Just imagine a well-read practitioner treating a case of acute dysmenorrhœa, due to acute flexion, with tr. of guaiac, when we can do so much with Robinson's uterine repository. Just push the blunt end of the instrument up through the anti-flexed uterine canal, turn the screw in the handle, and the flexion vanishes in an instant," and Dr. Smith suited the action to the words. "What modern doctor would think of dosing a young woman internally when gynæcological surgery is so much easier? Then, doctor, the fee for such an operation is larger than for writing a prescription."

Dr. J.—"What! You would allow the fee to influence your professional judgment?" said Dr. Jones, indignantly.

Dr. S.—"The expenses of a medical education nowadays are larger than they were when you were a student. I am told that the colleges, fifty years ago, used to take the students' notes for lecture fees, and wait for payment until the students became settled in practice. Such a system could not be expected to provide much instruction. I am not surprised that gynæcology was a neglected art."

Dr. J.—"That is all right about the colleges and about Dr. Dewees and his treatment of dysmenorrhœa, but I don't know about Robinson's repository. I am afraid you will find trouble in getting the women around here to submit to its use. Most of the young women expect to marry shortly, and would decline on that account, while the married ones have husbands who guard them jealously. For my own part I would not want to advise a woman who complains when she is unwell, and whose uterus may be tilted either forward or backward on itself, to have the machine you mention as a repository thrust into her cervical canal to lacerate and bruise the mucous membrane."

"But it is harmless in skillful hands," said Smith.

Dr. J.—"I should want to try milder remedies first, and be pretty certain that her general health was progressing from bad to worse, before resorting to a method of treatment which my judgment tells me involves great danger. Don't women die after these manipulations sometimes?"

"I see where you are drifting," answered

Dr. Smith pompously. "Blood and fatal surgery cannot always be avoided, but brutal and cruel surgery should never occur. I don't expect to make 100 ovariectomies without some deaths, and it would be cruel to deny all women the benefits of the operation because a few will die. Furthermore, antiseptic surgery is doing so much for gynecology. If one's instruments are soaked in antiseptic solutions, there is no danger of conveying bacteria into the wounds of one's patients. Septicæmia is the *bête noir* of gynecology, and abdominal surgery. Bacteria cause septicæmia; and you see, if your sound and repositor are aseptic, free from bacteria, there can be no danger in treating dysmenorrhœa in the way I have indicated."

Dr. J.—"What is this septicæmia you speak of; when I was a young man we heard nothing about that disease? If a woman died after an injury to her uterus or peritoneum we usually attributed the death to peritonitis. We knew nothing about septicæmia. That appears to be a new disease."

Dr. S.—"O, yes, Doctor, in your day nothing was known about combatting and preventing septicæmia. Peritonitis with opium and camphor embraced the pathology and therapeutics of abdominal surgery. But to-day, how different! We have learned dissertations on micrococci, bacteria, and microbes, and fermentation and putrefaction, on which to base our pathology of septicæmia, while our therapeutics embrace surgical methods and the use of innumerable agents, which have the power to destroy the movements of bacteria *et id genus omne*, and to arrest fermentation and putrefaction."

Dr. J.—"Do you know why we had no septicæmia in my student days, Dr. Smith? Have your teachers told you the reason why the older works on surgery do not contain the word?"

Dr. S.—"I suppose it is because you had no such methods of research as we have. Microscopy was a science almost unknown. Physiological and pathological chemistry were confined to the laboratories of a few teachers in Germany and France. Who would have thought of making a microscopic examination of the secretions from wounds fifty years ago? And what surgeon of your acquaintance owned a microscope stronger than the common magnifying glass? Of course you couldn't recognize septicæmia."

Dr. J.—"I don't just like that explanation, Doctor. It will answer very well to explain the apparent increase of Bright's dis-

ease, to attribute it to the fact that all physicians nowadays make chemical examinations of the urine, where but a very few made it in the days of Dr. Bright, and therefore the disease is detected now where it was formerly overlooked, but the conditions are different with septicæmia, as I understand it. In my early days we had no septicæmia because we took pains not to cause it. We had some respect for the writings of the ancients and the traditions of surgery. They told us that wounds of the abdomen were mortal, and we took great care never to inflict injuries on those parts. Hippocrates explained to us how to use the trocar in dropsy, and why it was a safe instrument in disease, and a deadly stiletto in health. We ascertained that our patient was really ill with some disease of the womb before we used the uterine sound, and consequently never had to account for deaths from unexpected causes. We made a fine distinction between the subjective and the objective symptoms. We did not measure the depth of the womb simply because the patient said she had a pain in it."

Dr. S.—"I don't propose to use these instruments on well women, Dr. Jones. We recognize the fact that a diseased uterus would tolerate manipulation that would be resented by the healthy organ."

Dr. J.—"We have never had a case of septicæmia in this neighborhood since my practice began, and we have had a good deal of abdominal surgery too."

"That is remarkable," said Dr. Smith.

"There was Tom Brown's wife, down on the Robert's farm, who fell from a hay-mow and impaled herself on a pitchfork handle, the handle entering through the vagina, pushing upwards into the abdominal cavity fourteen inches. We gave her opium and camphor, and kept ice packs on her abdomen until after the 4th day. She recovered perfectly. That was a rare case. Then there was the Wilson boy, who was gored by a bull. His abdomen was torn open from symphysis pubis to the gall bladder. The bull tossed him all around the barn yard, smearing his intestines with all manner of barn yard filth. I washed them off as best I could with a soft cloth and a little warm water, then drew the wound together with a few stitches, and applied compresses wet with lye water. Gave him opium and camphor. For about a week bloody serum oozed from between the stitches, but aside from that nothing unusual occurred, except his recovery."

"You must have lost patients after severe injuries, in the course of profuse suppuration, with chills and fever," asked Smith.

"Certainly; we called that hectic fever, wound fever, reaction fever. Nowadays you call it septicæmia. But such things do not concern your specialty."

"Only in a general way. Septicæmia may come on in the course of any disease, and we gynæcologists are interested in it under any circumstances."

"Yes, I know, but you ought to be fully alive to the fact that the conditions you designate by that term are the result of causes introduced from without. I am rusty in my classics, but I can see in the etymology of your word that it means a poison in the blood. That poison is not developed in the blood, but is introduced from without."

"Oh! I see, Doctor; you will make a distinction between septicæmia and pyæmia."

"To be sure. Pyæmia results from an inflammation of one's own tissues, and septicæmia results from an inflammation of some one else's tissues."

Dr. S.: "That is a distinction with a clearly defined difference."

Dr. J.: "And be sure you profit by it. You can easily cause septicæmia by wounding animal tissues and making a way for poisons to reach the blood."

"I must be going, Doctor. I am very glad to know that I have a colleague here in this village who has had so much experience. I shall be glad to see you often at my office. I have all the leading medical journals and standard medical authors, and you are welcome to them at any time. We shall be good friends I know. I want you to feel that I have brought gynæcology here to assist you, and not to interfere with your work as a general practitioner."

"Don't be uneasy, Dr. Smith, about my relations to your specialty. I have seen several young men try to build up a practice in the way you propose. The brainiest ones are now good practitioners, ready at all hours to render aid to the sick or injured without regard to their specialty."

"You tell me that you have known several who started out as specialists, and who are now doing general practice?"

"Several."

"I don't propose to abandon my purpose in that way. My time and money have been expended in acquiring the art of treating female complaints. Why, doctor, my instruments

have cost me as much hard cash as an average farm around here is worth! I can't afford to yield my purpose without a struggle."

"Now, before parting, Doctor, for I must be off making my visits, let me advise you from my experience. Time is a great leveler as well as healer; you will get over being anxious about the kind of patients you will have, and be satisfied to treat any who are sick."

"No. I shall stick to my specialty," said Smith, firmly.

"Your instruments and knowledge of their use are very good in their proper place, but may prove dangerous in the hands of a young man determined to succeed. Now, I am interested in the young men of the profession. I want to help them. I esteem their confidence and respect. They make all the great discoveries, and we old men usually see that they are utilized in practice."

Dr. S.: "You are flattering me, Doctor."

Dr. J.: "No, I am advising you."

"Good-day," said Smith, moving toward the door.

Dr. J.: "No; just one word. Before you use those instruments, suppose you get all ready and then let me see your case."

Dr. S.: "Why, Doctor?"

Dr. J.: "You don't want to kill anybody do you?"

"Of course not."

"Then take advice from some good general practitioner before using them. He can determine what your patient will tolerate, and save you from endangering your reputation by rash experiments. One blunder with your sound might cost a life and spoil the making of a great gynæcologist."

"You are skeptical and timid, Dr. Jones. Good-day."

"No, I am seriously in earnest, Dr. Smith. Call again, and often."

Ulcers and Their Treatment.

BY WM. H. DE CAMP, M. D., GRAND RAPIDS, MICH.

A GOOD definition of an ulcer is the one given by Dr. John T. Hodgson in the *International Encyclopædia of Surgery*, viz.: "An ulcer is a solution of continuity maintained either by some local cause or by some constitutional disorder."

Ulcers may be either simple (i. e., non-specific) or specific. In this paper I shall confine

myself to the consideration of non-specific forms mainly. Specific ulcers are well exemplified in those resulting from destruction of normal tissues by the development of such special influences as disintegration from cancer, tuberculosis, syphilis, and similar causes.

The non-specific forms may result from mechanical destruction of parts, or from constitutional causes, or both combined. Among the local causes we have direct mechanical violence, the corrosive effect of chemicals, the application of intense heat and cold.

Constitutional causes may be such as produce erysipelas, periostitis, acute inflammation, or thrombus or obstruction of the circulation to a part. In some cases we have both causes acting to maintain, or even enlarge them, when once developed, as shown in the gangrenous destruction of the tissues far beyond where local injuries had done their destructive work.

TREATMENT.

The treatment of ulcers enters largely into the work of the surgeon; therefore, it is worth much of his study and attention. The first thing engrossing the attention when called to treat a case, is to determine its cause, duration, and present treatment, as well as that of the patient. When found to result from specific constitutional causes, we have to do all in our power to correct the same before commencing the direct or local treatment. When this is as fully accomplished as possible, we can then commence direct work on the sore proper.

If it be cancerous or epithelial, or any other non-granulating form, we have to convert it into the simple form either by caustics, the cautery, or other means capable of destroying all morbid growth.

This brings all ulcers to two forms of treatment, viz.: preparatory and reparative. When there is dead tissue, either resulting from destruction of morbid growth, or from the effects of mechanical violence, heat or cold, we have to commence the work of separation of dead from living structures.

To accomplish this it becomes necessary to cause rapid decomposition or disintegration of dead parts by such means as do no harm to living.

This is best accomplished by warmth and moisture. To produce these in the best and most agreeable form to both the sore and patient, we find nothing to answer so well as the poultice. As regards the material to be selected for the poultice we do not find

in practice so much difference in the effects of one article over another, provided the poultice is soft, warm and moist. We find it domestically and professionally prepared from a host of articles, with a view to procure some specific influence from their composition. I have seen them prepared from such articles as bread and milk, flax seed, slippery elm, carrots, beans, bran, potatoes, vegetables, or herbs, and even from cow dung. The latter may be a good article for a cow boy on our western prairies, where other material cannot be procured.

From my own observations, the best poultices are the flax seed, slippery elm, or the bread, or crackers and milk. Where we have much smell from the decomposing tissues, it often requires some antiseptic, as a weak solution of carbolic acid, to be used in their composition; or in case of erysipelas in surrounding parts, I find nothing better than the acetate of lead in combination with the poultice.

After all dead tissues are removed, we then have to give our attention to the reproduction of the parts lost, or what we may call the healing or regrowth.

Before proceeding to the description of this work, it will be well to state some physical and physiological conditions necessary to regrowth of structures, viz.: The healthier the person, the more active the new growth or granulations will be. New structures cannot admit of the full pressure of the blood as in older tissues, without causing hypostasis to such a degree as to produce rupture of the new blood vessels, which will result in apoplexy of the parts, destroying the new growth.

Granulations tend to produce the same structures as those from which they spring. Nature produces a lymph deposit over the raw surface in which to form new vessels.

Nature, where unmolested, protects all sores from the air by a part of the lymph drying into a scab, and retaining this unchanged until all repair is completed. She never washes a sore or changes her dressing.

All skin growth is from the edge of the existing skin.

Skin only produces true skin for one and one-half inches over new structures before it begins to be only capable of forming cicatricial tissue, or that part which is principally cuticle.

The skin never begins to form until the granulations have grown fully as high, or higher, than the edge of the sore.

Granulations, to be healthy, must have a bright red or florid appearance. When the exudations from the sore are no longer lymph, but become serum or pus, then the granulations no longer produce new capillaries, but become infiltrated and turn pink, and slightly translucent, and build above or beyond the edge of the skin and produce what is known as "proud flesh," so termed by the vulgus populus. The granulations from below must join with the edges of the sore at the surface before skin will reform or extend over them.

To procure regrowth or healing, we must observe the natural laws I have specified in order to get the best results. After the sore no longer requires poultices to get rid of dead structures, then the best means I have found is a dressing of an impermeable nature, as cosmoline on thin cloth. This should not be removed oftener than once in from one to three days, and the time governed by the excess of discharge. The largest and worst ulcers I have ever treated have done the best where no water or liquid has been allowed to touch them after discontinuing the poultice. Many times I see sores that have been washed once or twice daily, show sickly granulations and heal slowly. They wash away all lymph deposit, and as soon as nature has had time to reproduce it, they remove it *ad infinitum*, until nature gives up in disgust and only lets them have the sore as long as they please, and they let it alone when neither nature nor their work can do better than to leave it an indolent ulcer for some regular and scientific treatment to be adopted, or some remarkable plaster suggested by some old woman has produced an artificial protection that imitates the scab cure by nature herself.

POSITION.

Besides protection by impermeable and non-irritating dressings, we have to use care in position to prevent congestion and rupture of newly formed capillaries, or we will lose much time in having to remove the extravasated blood and dead tissues before others can form.

CONSTITUTIONAL TREATMENT.

This, in many cases, becomes an absolute necessity to insure success. Ulcers of small or moderate size, while the patient has medium or fair health, require no constitutional medication or attention.

Cases where the sloughing is great, or attended with erysipelatous inflammation in surrounding parts, or which have assumed the gan-

grenous form, will require prompt and vigorous constitutional improvement. For this purpose I have found tonics and stimulants, either one or both, to be the only means of preventing the destruction of uninjured tissues.

Of all the tonics, quinine stands first, and next is iron. The alcoholic stimulants are strictly necessary where there is nervous prostration manifested by dryness of the tongue and skin. They are required in the small or stimulant amounts instead of sedative quantities. As a rule in extensive sloughing, we require from four to eight ounces of whisky or brandy daily, and from one-fourth to one-half drachm of quinine during the same time. I could cite many cases in proof of this if time would permit.

LOCAL MEDICATION

is of much value in those cases where the sore has long existed, either from its nature or from improper treatment. Where the granulations have become extremely sensitive, forming what is termed irritable or neuralgic ulcer, I have found the best medication to consist of iodoform with powdered soap-stone, or in an ointment with cosmoline. Most writers ascribe this state of a sore to constitutional debility or anæmia, but in my experience it has in nearly every case originated from exposure of the surface to the air, or from the direct application of some wet dressing or poultice. This is shown to be true by all irritability leaving in a few hours when some mild unguent or oil is substituted for wet dressings. This sudden change could not occur if due to constitutional causes. Where there exists a syphilitic taint to modify a simple ulcer, or where it is directly produced by this cause alone, I have found no better application than the oleate of mercury combined with cosmoline, to form a five-per-cent. ointment of the oleate. Of late my attention has been called to the use of binoyd, or per oxyd of hydrogen as a local remedy. From the few cases where I have used it I look for splendid results in arresting suppurative action in sinuous or sacculated abscesses. Its effect is to speedily decompose all pus corpuscles that come in contact with it. Where pus is present you find a frothy foam formed; the result of the hydrogen liberated.

Dentists speak highly of its use in healing ulcerated gums and other ulcers of the mouth.

PRESSURE.

Where the ulcer is recent and the granula-

tions have not reached the surface this must be slight, viz.: not more than the skin in health exerts upon the parts. When the ulcer has become indolent and granulations are infiltrated with serum, so as to elevate them above the surrounding parts, then much more than this can be applied. About the best means to accomplish this is to use an elastic bandage or the adhesive strips. This treatment is nearly always required in eczematous or varicose ulcers of the leg.

SKIN-GRAFTING.

By this new means of producing healthy skin large surfaces, which otherwise could only be closed by dense cicatricial tissue or left altogether unhealed, can now be restored to nearly a normal condition. It was first brought to the notice of the profession in 1870 by M. Reverdin in France. Since that time we have sufficient evidence from all surgeons who have resorted to it to prove it to rank with the most useful inventions or discoveries in modern surgery.

To carry out the operation successfully requires much care and observation as well as a careful study of the methods used. There have been several modifications practiced, such as that proposed by Dr. John T. Hogden, of St. Louis, Mo., with success by dusting over the surface cuticular scales from the foot or other parts.

This writer thinks this method equally good with skin-grafts, but my experience does not confirm this statement.

The use of grafts from amputated limbs or dead bodies has proved a success even after they had been amputated four or five hours.

The growth of skin from animals has not, so far as I can learn, proved a success.

The most successful method I have adopted in the treatment of about twenty cases, has been the transplanting of small bits of skin from the living subject.

This is easiest done by picking up with a needle a bit of skin and snipping it off with the scissors in pieces the size of a wheat kernel; these are carried on the needle to the place desired.

Points and time for grafting; condition of system; time for discontinuing dressing are all of much importance.

If the new parts are left unprotected by some impermeable dressing until the true skin is well organized it will make a vast difference in its pliability. In all cases where large surfaces have been reproduced I have had them covered with some cloth oiled for

many days or weeks after entirely healed. This prevents exhalation from the new tissue, which keeps it amply moist until the fibrous structure is well organized. It prevents most of the contraction of the cicatrix, which we often see occur to such a degree as to impair the usefulness of the limb.

Under the plans of treatment I have set forth I have never seen any considerable contraction, and believe it hardly possible to occur.

The Chloroform Habit as Described by one of its Victims.

READ FOR THE WRITER BEFORE THE DETROIT
ACADEMY OF MEDICINE BY LEARTUS
CONNOR, M. D.

THE author of the following personal narrative was a patient of a member of the Academy. At the request of the physician the patient wrote out the story and it was given to me to read in connection with the consideration of the chloroform habit:

DEAR DOCTOR:

I shall gladly write for you some account of my experiences as a chloroform habitue—provided, of course, you agree that my secret shall be as safe with you as it has been these many years. But you have never known the whole secret as I mean to tell it now—for any effect it may have to save others from what is to me a memory of shame. To this day I tremble when I think what it might have been—and it is many years since I broke from that awful bondage. I dare not boast even now of my freedom. I will try to make my story short.

With me the chloroform infatuation was a case of love at first sight. I had been always temperate—almost a total abstainer, in fact, from stimulants of all kinds. Once or twice I had smelled chloroform, and thought its odor pleasant. I was a young man just finishing my education, fond of study, and taking a keen interest in everything about me. I had had some curiosity to know what it was like to be put to sleep with chloroform, and one night just before retiring I happened to see a one-ounce bottle of chloroform, which had been bought to use for a tooth ache, I believe. I took the bottle home with me and when I went to bed put a little of the chloroform on a handkerchief, and for the first time felt the delightful sensation of being wafted through an enchanted land into Nirvana. Those who know nothing of intoxication, ex-

cept in the vulgar form produced by whisky, have yet to learn what power there can be in a poison to create in a moment an elysium of delight. It is a heaven of chaste pleasures. What I most remember is the vivid pictures that would seem to pass before my eyes—creations of marvellous beauty—every image distinct in outline, perfect in symmetry and brilliant in coloring. The enjoyment is purely passive; you have only to watch vision after vision, but why each vision seems more wonderful and charming than the last you cannot tell, and you do not stop to question.

I suppose that it was an unfortunate circumstance for me that I had never been drunk before in my life, and I never thought of comparing my blissful condition with that of the wretches I had sometimes seen staggering through the streets. I had made a great discovery. I had found a golden gate into dreamland—dangerous indeed to approach, I knew that, but who would heed any danger where the prize to be obtained was so great? and guarding jealously my secret, I took care night after night to have by me the key to that golden gate. Probably I inhaled from half a drachm to a drachm or two each time. Generally I did not waken again until morning, and my sleep seemed to be just as refreshing as usual, only now and then I would wake with a trifling headache and feel disposed to lie a little longer in bed than common. My bodily condition did not seem to suffer in the least and my faculties all seemed as keen as ever. I felt no craving for my pet intoxicant during the day—did not give it a thought often until bed-time came, and then it would occur to me for a moment to try and see how it would seem to go to sleep in the ordinary way, the conclusion always being that—to-morrow night I would make the experiment. So, before I knew it I was a slave. I would say to myself, "It does not hurt me, it seems to have no more effect than the cigar my friend smokes after dinner. Really I believe it is a positive benefit. It seems to keep my bowels regular, and it certainly makes me sleep soundly all night."

But after a while I found that I was using a larger quantity of chloroform than at first. I would take a two-ounce bottle half-full of the stuff to bed with me, and inhaling directly from the bottle would forget at last to cork it, and in the morning it would be empty. Sometimes I would wake after midnight, or partially wake to take another dose. I found that there was a bad taste in my mouth all the time, keeping me in mind of chloroform.

I was often nauseated in the morning, and sometimes at intervals during the day. I began to feel a longing for chloroform whenever I had a little headache, or was dispirited from any cause, and I sometimes yielded to what I already knew was a morbid craving. I began to be indifferent to the things that personally had interested me, avoided society, and became depressed in spirits. My complexion became sallow, whites of the eyes yellow, the bowels sometimes windy and unnaturally loose, skin dry and seemingly bloodless, and injuries of the skin did not heal rapidly. In winter there was a tendency to chapping, that had not before been noticed.

Meanwhile I had ceased to have visions, or they came rarely. I began to realize that my pet habit was becoming my tyrannical master. I had no special cares to drown, but it became my insane pleasure to draw over my senses the veil of oblivion. I loved the valley of the shadow of death. I knew there was danger that some night I should pass over the line, into a sleep from which there would be no waking, but death had no terrors for me. Nay, to bring all my faculties, and powers, and ambitions into the sweet oblivion of transient death was the one pleasure for which I cared to live. I was conscious of a profound moral deterioration; I became materialist; I had no soul; immortality was a dream of the ignorant; I, who had a thousand times annihilated my own soul with my senses, knew that the dream had no corresponding reality.

Yet all this time I continued faithful in my daily duties, and resisted successfully the temptation to hurry through my evening so as to get the sooner to my chloroform. I did not admit to myself that I was a slave to the habit, or even that the habit was an injury to me, as yet; but I began to be afraid, and the more when I found, when I resolved as often I did, to omit my nightly indulgence just for a week, how impotent my will was in the matter.

This was my condition at the end of two years. I was still only using a moderate quantity of chloroform, about three drachms daily, exceeding that quantity only by accident. An opportunity offered for a change of occupation and surroundings, which I eagerly seized in the hope that it might enable me to break my fetters. For about three months, under the new surroundings, I abstained from chloroform, and found it really not difficult to do so. I began to think that I had greatly over-rated the power of the

habit. At all events, after the first week I had no craving for the stimulant. But one day I came across a bottle of chloroform. When I saw it I smiled to myself to think that I had imagined myself a slave of any such thing. Night came, and when I was ready for bed the devil of appetite gave me his commands, and I obeyed. Just one smell to see whether I really wanted it; I would not take the bottle to bed with me. So I inhaled, standing, directly from the bottle—a full pound of chloroform—and with the first breath of the vapor came back with renewed force, all the old appetite, keener than ever from long abstinence. Once more I saw the old time visions, as beautiful and as vivid as at first. One peculiarity of these visions I may speak of right here. Objects would appear with wonderful sharpness of outline just as they would be seen with the eyes, only reduced to microscopic size like objects seen through an invented microscope.

To go on with my story. What happened after I got the bottle in my hands I do not know. The next morning I found the bottle corked and in its place, but only half full of chloroform, and I was told that I had been found lying in some kind of a fit; some thought I was drunk—as indeed I was. From this time I realized myself a slave, but not now a willing one. I did not again commence at once the use of the chloroform, but at intervals of from three to eight weeks would indulge in a regular spree, lasting from one to three days, during which I would keep myself as nearly as possible dead drunk, and would consume from four to eight ounces of chloroform. All this time I kept my habit a secret, and continued to do my ordinary work with the usual zest in the intervals between my sprees. At last discovery came. You well remember how I was found apparently lifeless, and how by the active use of restoratives, you brought me to myself. How my moral perceptions were quickened the moment I saw myself through the eyes of another! You were a true friend to me in that hour of my trouble. I had thought the doctors only mercenary creatures like the rest of us; perhaps the majority of them are so, but when you came to me in my humiliation; and tenderly, and without word of reproach, helped me to recover my self-respect and my power of will, I gained a new idea of what the true physician may be and sometimes is for the sick. You must let me say these things now; I have never put them in words before, as never before have I told to anyone

the story of my degradation. You know that it was not in a week or a year that I was placed morally on a firm foothold again. Indeed, you did not know how often, after I had given you and myself my word and pledge to abstain wholly from chloroform, I relapsed, taken unawares by the tempter. For more than two years I kept up the conflict, too often thinking the final victory won, only to find there was one imperative command it was useless for me to attempt to disobey, and that command came to me whenever the least whiff of chloroform entered my nostrils. Once or twice I tried the expedient of returning to my first practice of a regular moderate use of the stimulant, but I found that moderation was now almost impossible. If I went to sleep under the influence I would awake again, and find myself then unable to sleep, distressingly wide awake and nervous, until I courted again my "dearest foe." Symptoms like those of delirium tremens several times developed. I saw "things," not now beautiful visions, but shadowy images, that filled me with nameless, irrational horror. Appetite was capricious. I was frequently nauseated, but food seemed to relieve this condition; vitality was low, the blood ran sluggishly in my veins, and seemed especially to desert the surface of the body. I suffered particularly in cold weather, and it was during cold weather in winter, especially, that I found it almost impossible to resist my besetting temptation.

These particulars, since you ask for them, I have given thus fully in the hope that by using me as "an awful example," you may accomplish something in the way of warning others against such a fate as mine. By God's mercy I am saved, but without your patient help, and faithful warning and encouragement, I think I should never have dragged myself from that horrible pit of death into which I walked so carelessly. At last I prevailed by sheer force of will. I had recovered enough faith in the soul to assert my freedom, and I now look back upon those years of conflict with a kind of self pity, to think I could have been so weak. But I do not to-day court temptation. I am not conscious of a lurking appetite, but I dare not put my virtue to any severe test. I am sure, however, that the chloroform habit is one that can be broken by steady determination. I have no faith in any process of tapering off. It is just as easy to quit once for all, as to prolong the agony, and the suffering is often purely imaginary. It took many months for

me to recover fully my health, but whenever I stopped the use of chloroform I began to improve in every way.

Doctors sometimes advise patients to use chloroform for the relief of trifling ailments, or they fail to remonstrate against the practice when they hear of it among their patients. If they knew the power of fascination it has for some persons at least, they would say: "Let it alone. The danger of the wine cup is nothing to that of the chloroform bottle."

The Chloroform Habit.*

BY J. E. CLARK, M. D.†

But a few short years ago, in the memory of many here present, a surgical operation was a synonym for all that was terrible in the present or the hereafter. The cruel torture and unspeakable agony inflicted of necessity by the surgeon's knife and manipulation required the pen of a Dante to depict. Who can imagine the "ghastly spasm and racking torture" of the writhing agonized patient whom the fear of death, and this alone, placed in the power of the surgeon some fifty years ago, who will not regard with the most intense satisfaction the present harmless, painless and satisfactory surgical procedure? What greater beneficence to the human race can be conferred than this, the relief of pain and the prolongation of human life? Its use increases the accuracy of diagnosis, facilitates operations by its relaxing properties, extends the scope of the surgeon's skill, infuses courage in the patient, permitting early diagnosis of diseases where delay would have meant death, and reduces to a minimum the terrors of parturition. Surely the discoverer is entitled to a wreath of immortality.

And now, having said this much in favor of anæsthetics, chief among which we place chloroform, let me proceed to say that although it is one of the greatest blessings ever conferred upon the human race, yet the perversity of human nature is such as to render even this at the same time one of the most dangerous. The vices of modern civilization keep abreast of its virtues, and the introduction of chloroform with its many advantages of use has unfortunately bred a habit, the deplorable results of which we can at present scarcely imagine. The effect of the excessive use of alcohol, absinthe, tobacco, opium, so common, show, "How use doth breed a habit

in a man," and create an appetite, the supplying of which too frequently results in the total destruction of both the body and mind of the unfortunate possessor.

The insidious advance of the alcohol or opium habit is well known, and its effect in gradually undermining and dethroning the bodily and mental faculties is thoroughly appreciated; but what have we to say of this modern octopus "the chloroform habit," which, stern and unrelenting as fate, is slowly but surely fixing its tentacles on our modern society, finding here and there a victim while patiently awaiting the development of a vice which, so far as danger to life is concerned, is infinitely superior to any of its predecessors.

That such a habit is becoming prevalent is scarcely known outside the profession and the life insurance companies, but, nevertheless, such is the deplorable fact, and the sooner it is appreciated and its danger recognized by the profession the better it will be for all concerned. A few years ago the auto-administration of the vapor of chloroform was an unheard of proposition; familiarity had not succeeded in blinding the public to its many dangers, nor had physicians with a culpable carelessness resorted to its administration as freely as at present.

Not long ago I was listening to a lecture delivered to a class of young men where influenza was the subject under discussion, and where the teacher was recommending the inhalation of chloroform as a curative. Unquestionably his therapeutics were correct so far as procuring relief from influenza was concerned, but he apparently ignored or was ignorant of the future danger to his patient lurking in the soothing, seductive remedy proposed. Unlike opium, absinthe, etc., the votaries of the chloroform habit perceive, at first, none of those unpleasant sequelæ so disgusting to the inebriate or morphio-maniac. The approach of these symptoms to the chloroformomaniac are gradual and deceptive, but inevitable, and at last the unfortunate awakens to the fact that he is in the grasp of a habit as unrelenting and pitiless as any depicted by a DeQuincy or a Gough. He finds his digestion impaired, circulation impeded, locomotion affected, correlation of ideas impossible, virility lessened, and a complete demoralization of both body and mind tending to a morbid condition, the only relief from which is the insensibility produced by chloroform, thus adding fuel to the fire and eventually ending in syncope and sudden death. "Facilis decensus averno" may truly

*Read before the Detroit Academy of Medicine.

†Prof. of Chem. and Physics, Mich. Coll. of Med.

be said here. Its undoubted efficacy in cephalalgias, asthma, chorea, spasms, insomnia, local pains, parturition, etc., recommends it as a therapeutic agent and as a result its use is gradually increasing, and at the same time its abuse in direct ratio.

Were it not for the danger of instant death, which, like the sword of Damocles, hovers over the head of the victim to its influence, its abuse would perhaps be no more deplorable than that of opium etc., but when we consider the various conditions likely to present themselves which may give rise to a fatal result, we are astounded that men and women should be found willing to risk their lives for a moment's gratification. Symptoms of the utmost importance which the experienced surgeon regards with solicitude, are totally ignored, and inhalation proceeded with in solitude, where effects ordinarily of minor importance may prove fatal. The method of administration usually pursued, is by placing a quantity on a napkin and applying over mouth and nostrils, inhalation being proceeded with until the agent obtunds sensibility, and anæsthesia, more or less profound, results.

The amount required depends on circumstances, the subject once started, rarely ceasing until profound insensibility results.

"The patient becomes altogether unconscious of all external impressions; the muscles become relaxed and the action of the heart slow and feeble. The respirations become shallow and weak, in proportion as the sensibility of the nervous system and the energy of the muscular movements are lessened, and the blood in the arteries becomes dark. When thus anæsthetised the patient is, undoubtedly, on the verge of death, and requires the most careful watching, by the person who administers the chloroform; his finger should never be off the pulse nor his eyes taken from off the patient. In this state, the inhalation of a small additional quantity of this potent agent, the application of the vapor in too concentrated a state, or *the sudden rising up of the patient* might occasion death instantly from heart paralysis."

Who can read this description of incontestable facts in this connection and not feel alarmed at the criminal recklessness of its votary? I have had under my cognizance, five persons addicted to its use, more or less frequently, where no argument or entreaty has the least influence in preventing a repetition of the drug. Three of the five are ladies, one of whom contracted

the habit in consequence of its use to allay toothache, a second acquired it directly as the result of a physician's prescription to allay headache, and the third contracted its use after parturition, at the menstrual epoch. The results are as follows:

No. 1. Has practiced the habit about twice a week for over two years, with no unfavorable objective symptoms apparent. She complains, however, of head complications, and lately of lack of elimination of the chloroform from the blood, the odor being noticeable on the breath for from 24 to 36 hours. Heart-burn and dyspepsia are also complained of.

No. 2. A physician's wife, practiced the habit for upwards of three years, origin, the advice of the husband as a palliative for distressing headache. Died when under its influence, presumably from heart paralysis, caused by an endeavor to rise from the sofa to admit husband to room. The husband is since deceased; supposed cause, apoplexy, due to spasmodic closure of the upper opening of the larynx while under the influence of chloroform self administered.

No. 3. A young unmarried woman; uses it about once a week; amount at a time only about one-half ounce, sufficient to relieve nervous symptoms and produce sleep. So far she complains of no serious symptoms beyond irritation of stomach and an occasional sharp pain at apex of heart. Has been using it for over a year.

No. 4. A drug clerk; addicted to the practice for over eight years; bodily and mental faculties all affected; indecision; wakefulness; nervous tremors; loss of appetite; indisposition to exertion, either mental or physical; irritable stomach; nausea and vomiting; an uneasy feeling in the precordial region, with an increasing desire for the cause of his troubles.

No. 5. Male, aged 35, boarding at one of the hotels. A deplorable case; consumes on an average eight ounces daily; appetite gone; emaciated; halting, infirm and a pitiable specimen of the wreck the constant use of chloroform can make.

Last week Dr. Whiting, of ———, an intelligent and successful practitioner of medicine, returning from visiting a patient, entered his office, locked the door, and applied a handkerchief wet with chloroform to his lips. A short time after, his services being required, his door was burst open and he was found a corpse, a victim to the seductive habit.

In our city the chronicles of necrology

could show no less than three cases, within 18 months, of sudden death, the direct result of this habit. Let us then, knowing the facts and recognizing their importance, give the lesson due weight in our practice, so that to us cannot be attached the stigma of being, either directly or indirectly, the unconscious agent of an evil likely to prove in the future second to none with which mankind is afflicted.

Inebriety from Two Different Standpoints.

BY T. D. CROTHERS, M. D., SUPT. WALNUT LODGE, HARTFORD, CONN.

IN a large influential religious paper there appeared lately a two-column article, of which the following is the substance: Died, So-and-So, a grand reformer, whose name will be remembered through all the future, etc., etc. Once a clergyman, with high honors, he was permitted by God to fall to the temptation of strong drink, and after some years of wretchedness, reformed and escaped from the bondage of Satan. He went about doing good, opening the door to the captive, and breaking down the chains of the prisoner; freeing many from the bondage of drink; pointing out the door of escape through prayer and conversion. Then follows a long commentary on his life, in which it is shown that his fall, and long years of inebriety, was to prepare him for greater usefulness and power of good to the world, and particularly to rescue inebriates. The writer points out at length the special and peculiar privilege of being so trained to work for this class of sinners, and is positive that they will be greatly rewarded in the next world for their triumphs over this sin, and efforts to help others to be saved.

The editor comments on the moral grandeur of such lives, and how much better they are prepared to reform or point out the way of salvation for the inebriate. Finally he assures the reader that this man was by his fall and final restoration, doing far more for the world, than if he had been permitted to occupy the best pulpit with the largest power for good in any one church.

The hard-working, temperate clergyman, who for a lifetime teaches the great truths of his profession, is less fortunate in the moral grandeur of his life than this reformed inebriate, who went down into the depths, but to rise to greater heights, and so on. Thus this view, with all its logical sequences, was presented in its strongest light, to the evident

glorification of the inebriate who reformed, and the disparagement of the temperate man, who had no such opportunity to be prepared to help the poor inebriate. A view of this case from the standpoint of science and exact observation, was very different. He was found to have insane ancestors on his father's side, and consumption in all his mother's family. As a student he was brilliant and erratic, and as a clergyman he was intensely emotional, and changeable in his views. The death of his wife was followed by prolonged insomnia, for which he should have taken rest and change, with active medical treatment, but on the contrary he found relief in bitters and alcohol at night, and worked harder than usual. Later he was obliged to take bitters during the day; then spirits before preaching, and finally, was intoxicated in public and resigned. From this point he rapidly declined to a chronic inebriate. Four years after, he reformed in a Murphy movement, and became a temperance lecturer, during the remainder of life. In six years he relapsed twice, but recovered, and was an enthusiastic, energetic worker in the temperance cause. He died of pneumonia, and seems to have had an estatic delirium a short time before death, during which he counselled his friends in a very enthusiastic way. This counsel was published as death-bed testimony, the value of which was the subject of some difference of opinion.

As a lecturer on temperance he was very emphatic, and carried his views to the greatest extremes. He would often become exhausted and go to bed and drink large quantities of lemonade, and would suddenly change from one place to another, giving no reason for this except that he was tired. He was called peculiar and eccentric by his friends. At one time he would be strangely avaricious, then very benevolent, or extremely religious, or hilarious, or depressed. His egotism grew rapidly each year, and he boasted of how many persons he had converted, or had signed the pledge at his request.

Seen a little closer it was apparent that this man had a most pronounced heredity and defective inheritance, which predisposed to nerve and brain failure of some kind. It might be insanity or some of its family groups; or consumption and its allied members or diseases. It was a question of causes and conditions, which could have been determined with much certainty in advance. He was unfitted to bear the strains and drains of

life beyond a certain limit. Grief and overwork was manifest in insomnia, and alcohol was found to be a most attractive narcotic. The organism defective from heredity and still more debilitated by emotional strain and overwork, ran into, or developed inebriety most naturally. Inebriety was merely a form of physical failure, a disease which, from a certain point, ran a regular progressive course. The desire for stimulants was held in abeyance, but the degeneration went on, and was apparent in his unusual and erratic efforts in the temperance field. From the time of signing the pledge up to death, his career was over and along that mysterious borderland of sanity and insanity. His unusual acts were called enthusiasm and earnestness for the cause, and never noted as the symptoms of a failing brain.

All these efforts, lacking the steadiness of a clear, healthy brain force, were limited, and no degree of present excitement indicated their real value. Like the labors of a partially insane man in behalf of the insane, they would of necessity lack some element of stability and permanent good. Had the nature of his malady been noticed from the start, and he been placed under medical care and treatment, he would have been living to-day, and perhaps doing good work.

It is a curious fact, amply verified by any careful observer, that a large number of temperance reformers who are in the lecture field are thoroughly diseased men. The fact that they do not use alcohol is the only claim they have to be regarded as sane. Inquiry into their habits and mental operations will show the most significant signs of abnormalities of conduct and judgment. In some cases which I have noted, gluttony, dipsomaniac thirst for tea, coffee, lemonade, milk and other fluids were prominent. An avaricious grasping for money and dishonest means to procure it, or more commonly, a delirium for fame and applause, a childish love for notoriety coupled with intense egotism, and constant overrating their power and influence. Mentally changing from one thing to another with great rapidity, now buoyed up by great enthusiasm, then depressed into great sorrow by what seem exactly the same conditions. In brief, they are anomalies in all respects, no matter how eloquent and earnest. To the moralist they are leaders, reformers, pioneers of a new work, devoted, earnest christians, etc., but to the physiologist they are diseased *border liners*, men who live in the *penumbra* of

mental *eclipse*, and sooner or later pass over into the darkness of the umbra.

It is one of the curious facts of the times that inebriety should be discussed almost entirely from a moral standpoint. When a person becomes a chronic drunkard it dawns on the minds of his friends that possibly some diseased state of the brain may be present, but not before. In every town and city will be found men and women drinking spirits regularly, rapidly going from bad to worse, and because they do not give evidence of the most positive disease, they are considered sane and fully responsible. These poor unfortunates are permitted to go on, slowly committing suicide by drink, not only destroying themselves but others, through ignorance and neglect of those who should stop it. The acceptance and practical endorsement of the moral theory of inebriety results in plunging or precipitating the inebriate into incurable conditions, and most effectually destroying him. If the inebriate was considered a diseased man and forced, as a small-pox patient is, to go into quarantine and use the means for recovery, he could and would be fully restored to health in most cases. The fears of many timid men that to call a drinking man diseased might lessen responsibility, would in reality have the opposite effect. To have it understood that a drinking man was diseased would double his responsibility, and also the responsibility of his friends, who would be under greater obligation than ever to have him get well. A small-pox case that would be allowed to go up and down the streets would arouse public indignation, and soon be forced to go under treatment, as a sanitary public measure. The inebriate is a parallel; he is an object of public care as much as the small-pox case. If he cannot or does not help himself, and his friends are equally powerless, the public should step in and care for him, and their means or efforts should be directed to his restoration, not to destroy and unfit him for any future.

The time has come to regard inebriety from the standpoint of exact study, not from theory or supposition. No theological or legal training, or no experience as a drinking man will enable anyone to understand the origin and nature of inebriety. No study based on observations of a certain stage of inebriety will reveal all the facts. Inebriety must be studied by earnest, painstaking men, who will only draw conclusions from clinical records and histories covering all the conditions of causation, and which have in them

the promise of confirmation of other observers. This study must be lifted above all dogmatic assumption and speculative theory, and based upon facts upon which there exists no doubt. The presence of a very large army of inebriates in this country, passing through the successive stages of an insidious and fatal disease, which has up to this time been studied only in a very limited way, should rouse physicians and others to take up this neglected field of science. Inebriety should be studied and observed by physicians, and not by clergymen and moralists.

Absence of Liquor Amnii a Cause of Certain Forms of Congenital Club Foot.*

BY JUDSON BRADLEY, M. D.

When the surgeon sees anything wrong with the muscles and bones of any part of the human subject he tries to rectify the malcondition. When the anatomist finds anything out of the usual order he seeks for a cause to enable him to account for the abnormality. So when the obstetrician sees a newborn infant with deformity in one or both feet, *i. e.*, with any form of "talipes" he is led to ask what has caused this condition of the foot—this deviation from the normal?

This has happened to many practitioners more or less often; and somewhat frequently to myself in my own practice, as the following cases will show:

Case 1.—Was called to attend Mrs. K. (French, multipara), Oct. 24th 1881. When I reached her the first examination showed that the os uteri was beginning to dilate. The progress of the case was steady, so that the first stage of labor occupied only four and one-half hours. The foetal envelope was intact until the close of the first stage of labor, and did not at any time contain more than one or two drachms of fluid. When the membranes ruptured there was scarcely enough of liquor amnii to moisten the vagina. The baby when born proved to be a girl, and had a club foot of the calcanean variety. The dorsum of the foot was very closely applied to the anterior surface of the leg.

The treatment was such as would occur to anyone to employ, and consisted of a compress of cotton so applied as to hold the foot in proper position and a few turns of narrow roller to hold the cotton. The muscles readily yielded to this treatment and in a few weeks the child could retain its foot in position without the compress and bandage. The

difference in the feet was shown by a greater prominence of the maleoli of the affected ankle.

Case 2.—Attended Mrs. H. K. (German, multipara), July 22, 1883. Her labor was of fifteen hours duration in the first stage. The membranes were ruptured, but only four or five drachms of fluid escaped; nor was there any fluid behind the child's body as frequently happens, and which rushes out when the hips of the child escape the vulva. This baby proved to be a boy, and had a club-foot—talipes equino-varus. The treatment in this case consisted in applying a gutta-percha splint to the foot and leg in such a manner as to hold the foot in proper position, and at the same time make as little compression as possible on the weakened muscles, and was fairly satisfactory. The child's parents, however, gave up treatment too soon for the best results.

Case 3.—Attended Mrs. B. (French, multipara), September 22nd, 1884. Her labor was somewhat prolonged by the too early rupture of the foetal envelope, only a few drachms of fluid escaping, and leaving an irritable and rigid os uteri. In this case the first stage of labor was of six and one-half hours' duration. During most of this time the pains were very hard and only mitigated at the last by a full dose of morphine, which relaxed the circular fibres and allowed the os to dilate. The result of this labor was a girl having a club-foot—talipes calcaneus. Treatment similar to that instituted in the first case was employed in this case and gave very satisfactory results.

It will be noticed that these cases have a history of almost an entire absence of amniotic fluid. In no case did it amount to more than a few drachms; the secretory function of the amnion having been held in abeyance by causes not well understood.

Now I have attended other women in confinement, with whom there was also a very small amount of amniotic fluid, whose babies had natural feet, but I never attended a woman who had any considerable amount of this fluid, who gave birth to a child in any way deformed in the feet.

The question now arises how can a foot of a foetus be so incarcerated by the uterus in the absence of amniotic fluid, as to develop a deformity? This question is easier to ask than to answer. But it is easy to inquire how it might be, and on the other hand quite as hard to determine the fact. Authors for the most part, in their writings, ignore the etiology of such deformities, and of course

* Read before the Detroit Academy of Medicine.

any statement is more a conjecture than a statement of fact.

To my mind the condition of the foetus in utero—the liquor amnii being absent or deficient—is a condition of forced and continued compression so to speak, and if we admit a highly probable condition, that the foetus might be caught by the obliquity of the uterus, in such a way that a foot should be held by the edge of the placenta in an abnormal position, so that the forced compression, before mentioned, distorts the foot more and more, and the force be constant as it must be if the first premise is correct, we have a cause of congenital talipes that clearly explains the occurrence of such distortions.

We certainly cannot account for such accidents by saying that the muscles are paralyzed in part, while the antagonistic muscles contract and keep up the deformity, for in all these cases reported, the child, by its own muscular efforts, could pull the foot into place, but could not retain it there. Paralysis of muscles is not in my experience congenital, except in those rare cases of injury to the spine by too severe manipulation during delivery of breech presentation, or from defect as in case of spina bifida.

Another cause of club-foot in the new-born is pictured in Playfair's reproduction of one of Braun's plates, of a section after freezing (see Playfair's *Obstetrics*, plate II., ed. 1880, H. C. Lea). In this plate one foot of the foetus is represented as resting on and pressing the other foot in a direction to cause talipes calcaneus. In the absence of liquor amnii, it is plain that there can be but little relative displacement of the feet when the uterus is full and the positions are fixed. Consequently, the distortion, once begun, continues to grow more pronounced.

Since writing the above, I have attended case 4th, where the child had both feet distorted in the condition of talipes equino-varus. In this case there was entire absence of liquor amnii. That the muscles, any or all of them, were not paralyzed, is shown by the fact that both feet regained their proper shape without other treatment than the let-alone treatment.

I have offered these cases and made my statements and comments, gentlemen, to provoke your discussion. I have not gone into the bibliography, nor would I wish to write here what you already know of the literature of these distortions as well as I myself know, and besides, authors do not

treat upon the etiology of these distortions at all satisfactorily.

Proceedings of Societies.

Annual Report of the Secretary of Detroit Academy of Medicine, Sept. 9, 1884.

If work accomplished is any criterion of prosperity in a society, the Detroit Academy of Medicine may congratulate itself, at the close of this fifteenth year of its existence, on its past record, and look forward with confidence to future continuance in growth.

During the year just closed the Academy has held thirty-four meetings, besides two which were adjourned for some special reason, such as that of the simultaneous meeting of the National Board of Health.

The average attendance has been between 11 and 12, the smallest number—a wholly exceptional instance—being 6, the largest 17.

The number of papers read has been exceptionally large, and the papers have been of unusual value. Eight members of the Academy have failed to contribute anything in this line, doubtless being too much absorbed in personal professional work. Seven of their confreres, however, have commanded leisure enough to prepare two papers, and three—and not the ones, either, who are the least burdened with work of their own—have contributed three papers.

The following subjects have been treated in the papers presented, and have been discussed also in the Academy:

Cerebral anæmia.

Vital statistics of Detroit.

A useful catheter for operations for vesico-vaginal fistula.

Epistaxis, with an improved mode of plugging the nares.

Sudden deaths following delivery.

Acute desquamative nephritis.

Prolapse of the umbilical cord.

How to educate the people in matters pertaining to hygiene.

The obstetrical forceps.

Methods of determining the purity of drinking water.

The varieties of carcinoma (paper illustrated by the exhibition of numerous mounted specimens).

Lacerations of the perineum.

Puerperal fever.

Deafness resulting from mumps.

Diphtheria as related to school hygiene.

Prevention of diphtheria.

Management of puerperal women.

The use of mercury in the treatment of diphtheria.

Unity of croup and diphtheria.

Recent improvements in the methods of urinary analysis.

Action, physiological and therapeutical, of mercury.

Sewer gas, its connection with the etiology of diphtheria. (2 papers.)

Changes in the kidneys in different forms of albuminuria.

Relations of ordinary laryngitis and pharyngitis to croup and diphtheria.

Renal casts and their significance.

Jequirity in the treatment of trachoma.

At the opening of the year there were 21 active members in the academy. During the year one member has resigned, and one has removed from Detroit. Seven new members have been elected, four of whom have qualified.

One corresponding member has been added to our roll.

The academy has never sought to enroll a large number of names on its membership lists. The organization exists for the sake of work, helpful to individual members, and helpful to the profession. An imperative condition of continued membership is continued work, and under this law of our organization we have achieved such success in the past, that the name of the Detroit Academy of Medicine is known more widely than that of the State Medical Society of Michigan, and we look forward to larger achievements and a wider fame in the years to come.

A. B. LYONS, M. D.,
Secretary.

AUGUST 12, 1884.

The Academy met at the office of Dr. Connor, Dr. Bradley in the chair.

WRITTEN COMMUNICATIONS.

Dr. Connor read a paper on the Treatment of Trachoma by Jequirity (*Abrus precatorius*).

Dr. Gilbert: Is not jequirity simply an irritant, acting like other irritants?

Dr. Connor: It is unlike ordinary irritants, producing an inflammation of a specific character. It intensifies an existing inflammation, without of necessity imparting to it its peculiar character. Applied to the abraded skin it is capable of producing inflammation.

Dr. Cleland: In view of what has been already observed of the action of jequirity, I see a possible large field for its use, for instance, in certain forms of chronic ulcers, and in some of the recurrent fungoid growths from the cervix uteri. These latter cases are sometimes very troublesome. I have a patient from whom I have removed the growth ten times with the curette. I have applied fuming nitric acid, etc., but still the growth recurs. Dr. Jenks relates similar cases where it seems impossible to prevent recurrence of the growth. Possibly in such cases jequirity might have an action similar to that by which it cures granulations on the conjunctiva.

Dr. Connor: Some physicians have used jequirity experimentally in some diseases of the ear and of the nose, but not sufficiently, as yet, to formulate any law of its beneficial operation.

Dr. Lyons: The paper brings together the most interesting facts and discoveries relating to this newly introduced remedy. The idea that its effects are due to bacilli, has been conclusively refuted by several independent observers. The active principle is a substance—possibly a proteid, analagous to rattle-snake poison—soluble in water, still more readily in glycerin, but precipitated by alcohol. It is exceedingly powerful, the quantity obtained from one fifty-thousandth part of a grain of the bean sufficing if my memory serves me, to produce inflammatory action in the eye of a rabbit. In view of these facts, it seems to me probable that one reason why different oculists have obtained such widely different results in the use of jequirity, is because some have used the infusion quite too strong. I observe that 2 per cent., 3 per cent., and even 4 per cent. solutions are spoken of as those commonly employed. Such solutions are much stronger than those which were recommended when the drug was first brought to the notice of European practitioners. From one part of the seed 100 to 300 parts of the infusion was to be made, and the statement was then distinctly made that better results were obtained from these than from stronger infusions.

EXHIBITION OF INSTRUMENTS, ETC.

Dr. Connor exhibited a neat device in the way of a dropping bottle, so arranged as to deliver slowly and with perfect regularity, drops of any contained fluid.

Dr. Yemans: I have recently taken the pains to make a personal examination of some

of the sewers of which so much has been said of late. I have reported elsewhere the results of my examination, which did not in the least support the complaints that are so often heard from those who have no means of informing themselves, or who possibly find it to their interest to remain misinformed; but the facts are as I have stated them. Many a cellar in the city is more foul than the sewer in question. I have sometimes examined into the conditions in places where complaints were made of sewer gas, and I have more than once found that a proper sewer connection would obviate the whole trouble; although in other cases I have found that more efficient means than these would be required, such were the accumulations of filth, not in the sewers, but in cellars and vaults, which a regard for common decency should have preserved in better condition.

On motion, a resolution was passed that Dr. Andrews be requested to prepare a paper on Asiatic cholera, to be read at the next meeting of the Academy.

TUESDAY, Aug. 26, 1884.

The Academy met at the office of Dr. Yemans.

PREVAILING DISEASES.

Dr. Gillett reported some cases of cholera morbus and summer complaint in children.

Dr. Kinney recently saw a case of cropous pneumonia.

Dr. Frank reported bowel complaints as prevailing among city patients.

Dr. Carstens—Have seen a good many cases of dysentery; think there is a regular epidemic of this disease; do not think it is altogether due to malarial toxæmia; I think the usual bowel complaints take on a dysenteric character. These cases are mostly in the eastern part of the city; I think it is somewhat contagious; I treat these cases with suppositories of quinine, opium and ipecac. Chloroform for the tenesmus, ergot for hemorrhage, raw beef and barley water. I prohibit much liquid, but allow the patient to drink plenty of Virginia Seedling Wine, which is an astringent.

Dr. Gilbert—In my practice I have found that a tablespoonful of mutton suet stirred into a cup of milk and brought to a boil is a very excellent article of diet. For an injection, decoction of starch with laudanum.

Dr. Clark—Have seen some cases of bowel complaint, also typho-malarial fever.

Dr. Gilbert—I have treated patients with

astringents in the beginning, but when the patient is passing bilious stools it is best to give laxatives.

Dr. Bradley—In the Marine Hospital they are using the ipecac treatment, preceded by large doses of epsom salts.

Dr. Gilbert mentioned the case of a gentleman who ate a piece of watermelon which had stood in an ice-box for two or three days, and which made him sick at his stomach. Undoubtedly acetic fermentation had taken place, and continued in the stomach, caused him to vomit it along with his dinner.

Dr. Connor, in speaking of the mortality of our city, related the condition of Chicago as given in the Chicago medical journals, and also the daily press. The condition of the Chicago river and sewers is abominable. One section of the city is actually below the level of the sewers. He also gave a vivid description of the Chicago river and its branches; the scum on one of its branches actually furnishes a fertilizing material at times, and at others, soap-fat. If the death-rate in Chicago, with all this, is lower than our own, he suggested that we import a few stink-holes.

Dr. Gilbert: I once attended a colored woman in a dirty little house with everything about dirty, very dirty. Now if this patient had had typhoid fever, I would at once say that the dirt was the cause of it. The patient, however, went on to a good recovery. I think all this talk about the sewers of our city being the cause of so much sickness is not correct. I do not remember a year since 1865, when we have had so little diarrhœa and like complaints as we have had this year.

Dr. Bradley; I have not seen so little cholera infantum as we have had this year.

W. R. CHITTICK, M. D.,
Secretary pro tem.

SEPTEMBER 9, 1884.

The annual meeting of the Academy was held at the residence of Dr. Cleland. Dr. Bradley in the chair.

The reports of the secretary and treasurer were read and adopted.

The Academy then proceeded to the election of president. Dr. Long, receiving a majority of the votes cast, his election was made unanimous.

Dr. Clark received a majority of votes for the office of vice-president, and his election was made unanimous.

Dr. Lyons was unanimously elected secretary, receiving all the votes cast.

Dr. Bradley was elected treasurer.

Dr. Bradley, the retiring president, then delivered his annual address.

Drs. Cleland and Andrews were appointed to conduct the new president to the chair.

The Academy then adjourned, and repaired to the dining-room, where a magnificent repast was spread by Mrs. Cleland, and partook thereof.

W. R. CHITTICK, M. D., Sec'y pro tem.

SEPT. 23, 1884.

The academy met at the office of Dr. Connor, Dr. Long occupying the chair.

EXHIBITION OF PATIENTS.

Dr. Andrews presented an interesting case of interstitial pneumonia. The case was one, he said, of long standing. The patient was a soldier in the war of the rebellion, and served after the war as a soldier in New Mexico. It was at this time that he began to be troubled with cough, with no history, however, of any acute attack as of croupous pneumonia. Fifteen years ago I first prescribed for him, and he was then in much the same condition you see him in to-day.

The left lung is almost entirely solidified. Little respiratory sound is heard except over the large bronchial tubes; dullness is general over the whole lung, except where some dilated bronchial tubes are found. There is some depression noticeable on the left side, but the contraction is less marked than is common in such cases. Cough is troublesome and there is considerable expectoration. The man follows the occupation of a painter. He is able to work but cannot endure much exertion.

While in New Mexico in 1876 he was in the hospital three months, but this was not the beginning of his illness. At that time he raised blood, and has done so once or twice since.

The case may be regarded as a typical one, and illustrates one of the rarer affections of the lungs.

MISCELLANEOUS BUSINESS.

Dr. Cleland arose, and, in contravention of all parliamentary usage, addressed his remarks to the secretary. By vote of the academy these remarks, although of a highly personal character, are here placed on record:

"Doctor: It is not often that so pleasant a duty falls to my lot as the one before me

this evening. The gentlemen of the academy have delegated me to address a few personal remarks to you, in fact to convey to you their appreciation of your services as its secretary. Since you assumed this office it has had reason to admire the ability, faithfulness and untiring assiduity brought to bear in the performance of its duties. Never since the organization of the academy have the reports of its transactions been so complete and satisfactory, and we, as members, have felt that much of the credit awarded the Academy for its work has been due to the lucid and terse reports of its discussions from your pen. As a body it has been fully aware of the labor this has entailed upon you, nor has it been unmindful of the sacrifice of time and strength in the performance of these duties so well. Therefore, it desires, in addition to the words of regard and esteem with which it now salutes you, to present you with this purse of gold as a more substantial token than words of good will and friendship. It is the kindly wish of each individual member of this society that you may long be spared to them, and that you may have as much pleasure in disposing of the lucre as it has given them to present it."

The Secretary was so completely overwhelmed by the flattering tenor of this address and by the substantial testimonial accompanying it, that he could only stammer out in reply a few sentences expressing grateful acknowledgment for so unlooked for a mark of approbation.

The name of Dr. Jenks was proposed as that of a candidate for membership. Referred to committee on membership.

The President appointed as committee on membership for the coming year, Drs. Chittick, Gilbert and Andrews; as committee on papers, Dr. Connor.

Dr. Connor moved that from the first week in October till the last of March the Academy hold meetings every Tuesday evening. Carried.

The committee on membership reported favorably on the application of Dr. Jenks.

Dr. Andrews opened the discussion of the evening in the following remarks:

Cases such as that brought before the Academy this evening may be reckoned among the curiosities of medical practice from their infrequency, but they are not without practical interest, since we find a similar condition complicating many cases of pulmonary disease. The disease was first described by Lannec as cirrhosis of the lung.

Walsh, later, gives a graphic history of the disease, masterly in description, but it is interesting to note how completely our views of the pathology of the disease have changed in twenty years. The pathological condition is one not peculiar to affections of the lungs. A typical instance is seen in cirrhosis of the liver, and we find it also affecting the kidneys, and other similar organs. It consists in an increased development of the connective tissues. An analogous condition affects sometimes the brain and nerves. The conditions leading to such changes are similar in all these cases. Inflammatory action is the common antecedent. Thus we find a cirrhotic condition of the parts affected, following hepatitis, nephritis, etc. In pulmonary inflammations, either croupous or catarrhal, the normal condition, as a rule, is resumed after inflammatory action ceases, and this is true also in general, of nerve tissues.

Why it is that in some cases of these inflammations we have exceptionally produced this cicatricial formation, pathologists do not explain. In absence of accurate observations to determine this point, we can only refer it to some peculiar condition of the capillary circulation. It seems probable that it may be traced to some impression made upon the vaso motor nerves. Circulation seems to be interfered with, normal nutrition is diminished, and with lowered vitality, the formation of neoplastic tissue takes place.

We meet with interstitial pneumonia under a variety of pathological conditions. The disease consists in an increase in the fibrous structures of the part affected. Numerous minute cells, like leucocytes, develop, become elongated, until they assume the form of fibres. There may be such a development of neoplasm in the lung as to cause atrophy of normal tissues, sometimes resulting in their death, and thus leading to the formation of cavities.

The fact that these neoplasms follow the lines of the nutritional apparatus, gives color to the hypothesis advanced just now, referring the cause of the deposits primarily to derangement of function in the nervous system. Several classes of cases may be specified, illustrating further the probability of this hypothesis.

1st. Cases occurring in the aged. These present no peculiar symptoms. There is less occasion for respiratory activity in the aged than in those in the prime of life; there is greater rigidity also in the structures forming

the chest wall. The apices of the lungs become the earliest seat of the deposits.

2d. In syphilitic pneumonia, the formation, although not identical in character, is similar, and is connected with a lowered vitality. These cases occur commonly in infancy, and are frequent especially in still-born children. They seem to be a cause, indeed, of the death of the foetus.

3d. Cases in which pulmonary infarctions are followed by congestion of the lungs, especially when the apoplectic effusions are confined to minute localized areas. In these cases the change will frequently be found to affect both lungs, whereas, in cases in which the deposit is apparently the primary lesion, one lung only, as a rule, is affected.

4th. Cases originating in tuberculosis. This complication is most frequent when the tubercle is of the miliary variety. The tubercular deposits form centres from which malnutrition extends.

5th. Cases of anthracosis, or coal miners' consumption.

6th. Cases originating in lobular or lobar pneumonia, which may be either croupous or catarrhal. In the latter the conditions are especially favorable to the initiation of these changes, owing to the collapse of the air cell. In croupous pneumonia, when the disease is not confined to a lobule or to a few lobules of the lung, the conditions would seem also to be favorable. There is a vast mass of material—exudate, epithelial debris, etc.—to be removed, and as a rule this is actually accomplished in a few days. But in unfavorable cases the usual resolution does not thus take place; there is development of interstitial neoplasm, and we have a form of "phthisis" resulting, fibrous phthisis, which is in fact an interstitial pneumonia. In these cases the lung remains consolidated, perhaps for many years, without however occasioning serious inconvenience to the patient. At last, however, under provocation of an ordinary "cold," symptoms develop resembling those of ordinary phthisis, and frequently prove fatal. In these cases it appears that the proliferation of neoplastic formation has forestalled the removal of the products of inflammation. It is in cachetic patients that we look for such a sequel to attacks of pneumonia. The practical lesson for us to learn is that in pneumonia more than in almost any other acute affection it is important to sustain the vital powers of the patient, and leave nothing undone which can tend to favor ultimate nutrition during the stage of resolution.

DISCUSSION.

Dr. Cleland: The case that has been presented is one of unusual interest, on account of its rarity. Some points in the case are exceptional. The patient is only 43 years old; it is seldom that the disease in this uncomplicated form, attacks a person at so early an age—I understand that he was under 30 when the symptoms developed. It is remarkable also, that so little cardiac trouble has followed the pulmonary difficulty. We should expect cardiac lesions from the obstructed pulmonary circulation. While we usually expect that consolidation will be found first in the apex of the lung, we find in this instance that there is still some vesicular murmur in the upper portion, although there is more at the base of the lung.

Cases similar to this one frequently furnish us striking illustrations of the compensations by which nature maintains the balance in physiological functions. With diminished area of available lung, we have, necessarily, increased cardiac activity, leading very soon to hypertrophy of the heart or resulting in cardiac lesions. In the present instance we do not observe this, but I have seen cases where cardiac lesions have followed within nine months, consolidation of the lungs. The development of the sound lung, and of the respiratory muscles of that side is constantly observed.

The doctor's paper has presented very clearly and concisely all that can be said on the pathology of the affection.

PATHOLOGICAL SPECIMENS.

Dr. Bradley exhibited a specimen consisting of a fibrous tumor of the cutis. The case was chiefly interesting on account of the tender age of the patient from whom it was removed.

The patient is now ten years of age, but the tumor dates from very early infancy, and probably was, in fact, congenital.

It was situated on the left side, between the short ribs and the ilium, towards the dorsum. I made a section of the tumor for microscopic examination. Found great proliferation of fibrous tissue, some giant cells, spindle cells; also many spherical cells about one-third the diameter of a blood corpuscle. the tumor was about three inches long, three inches wide, and an inch thick.

Dr. Noyes: The eyeball I have here I enucleated to-day. The patient, a little boy five years old, was brought to me from a

distant part of the State, with the following history: Three weeks previously, while at play, was struck in the eye by a steel corset spring. When I saw the case it was evident from the great swelling and redness of the lids that an inflammation of a very severe character, affecting the eyeball, was in progress. The scars observed, coursing across the cornea showed that it had been fractured by the blow. The iris was observed to be opaque at the vertex and upper quadrant of the eyeball. Commencing a quarter of an inch from the verge of the cornea, was seen an oblong tumor, extending up under the lid at least three quarters of an inch. This I suspected to be connected with a rupture of the sclera at that point, and this, after enucleation, was shown to be the fact. The opening in the sclera, however, was found to be very small, not more than a quarter of an inch in diameter, and situated just back of the uvea. The eye was filled with lymph deposit. It is not easy to account for this rupture from the blow upon the eye. The sclera, from the toughness of its texture, is not easily lacerated or ruptured. In all my experience I can recall now but two or three cases of this sort. One of them, in fact, was a very remarkable case, and happened to a soldier at Fort Wayne soon after the war. In a dispute with the bar-keeper of a drinking saloon, the man dealt him a blow with the fist, first in one eye, then in the other. I found the sclerótica at the upper segment of the eyeball, at about a quarter of an inch from the sclero-corneal junction, ruptured horizontally, exactly alike in either eye, and through these openings the lenses had been forced. I found them lying exposed beneath the conjunctiva, and removed them. In one eye the recovery was good, so that by the use of a cataract glass the patient was able to read a newspaper.

In the case we have here, it appeared absolutely necessary that the eye should be removed in order to guard against or prevent the setting in of sympathetic ophthalmia and loss of the fellow eye, although no prodromic symptoms of such sympathetic inflammation were present at the time. Twenty or thirty years ago it was comparatively rare to meet with one who had submitted to the removal of a lost eye from any cause. Sympathetic ophthalmia, and its dangerous character, was not understood then as now. Nothing now is more common than an enucleation; it may be, indeed, that the operation is too frequently made. If, however, an error is

committed, it is always on the side of safety for the patients, and since now artificial eyes are so made and worn as almost to defy detection, how much more satisfactory this is than the unsightly stumps, which formerly were more frequently seen than at the present day.

Adjourned.

A. B. LYONS, M. D., Secretary.

W. H. LONG, M. D., President.

Proceedings of the Wayne County Medical Society.

DETROIT, Oct. 22d, 1884.

The Wayne County Medical Society convened this evening, with the President, Dr. C. C. Yemans in the chair.

Dr. Hal. C. Wyman read a paper on Dermoid Cyst, citing a case in which a man, aged 36 years, was wounded in the groin by a sabre. He had hydrocele, and after being treated by iodine the scrotum did not heal kindly. Septicæmia and death followed. The autopsy disclosed a dermoid cyst just beneath the left kidney. The tumor was about the size of a large orange, flattened in its anterior posterior diameter, and contained a conglomeration of all the tissues of which the human body is composed. The origin of dermoid cysts is not well understood, and the various theories of authors were cited.

Dr. Clarke: Am sorry the author does not state what a dermoid cyst is.

Dr. Leonard: Do you understand that bones are formed from dermoid tissue?

Dr. Wyman: Those of dermoid character. The blasto-dermic membrane should be divided into as many kinds as there are varieties of tissue, *e. g.*, bones, muscles, veins, etc.

Dr. Leonard: Billroth gives only three blasto-dermic membranes.

Dr. Wyman: That which was designed for one variety of tissue may wander into that which was designed for another, and thus form heterologous tissue.

Dr. Leonard: Do you do away with extra-uterine fœtation?

Dr. Wyman: No; but the bones, teeth, etc., in dermoid cyst are probably not from a fœtus.

Dr. Clarke: These tumors often remain dormant for considerable time, and then, without obvious cause, become quite active. Why do they thus remain dormant?

Dr. Mulheron: This patient reported should have reason for congratulation as going on record as a very remarkable case.

Dr. Chapin: Velpeau has reported a case in which a bone resembling a femur was found in a dermoid cyst in the testicle.

Dr. Wyman: There seems to be a lack of knowledge in regard to tumors, and especially in reference to their nomenclature, which seems to have no reference to their origin or natural history.

This patient did not receive proper treatment. There were sufficient indications for abdominal section, which should be made in all such cases.

Dr. Clarke reported a case in which a young lady of good family and health had a large number of warts, from the size of an apple seed downwards, on her neck. They grew very rapidly, and were in some parts forty to fifty on a square inch. The warts were removed with the scissors—some bleeding very freely—and the patient was directed to take iodine.

Dr. Yemans: Has seen two cases of keloid in the city lately. He discouraged operations, as they had not healed kindly, and were very liable to return. Electrolysis has not been successful.

W. H. ROUSE, M. D., Ph. C.,

Secretary.

DETROIT, Nov. 6, 1884.

Before the Wayne County Medical Society this evening Dr. C. J. Lundy read a paper on muriate of cocaine, illustrating its effects on a young man. The doctor cited quite a number and variety of cases in which he had used this medicine as a local anæsthetic, with remarkably good results. One of the most severe cases was the enucleation of an eye of a very nervous patient. When the operation was nearly completed it was deemed advisable to administer chloroform. In some cases the appearance of the instruments seems to have considerable influence over the patient.

The doctor uses a four-per-cent. solution—the one generally used by many is only two per cent.—and instills two drops into the eye every three or four minutes till eight drops are used. In many cases a less quantity will suffice. The cornea usually begins to lose sensibility in three or four minutes, the conjunctiva in six to eight, and it continues twenty to thirty minutes, or longer. It induces partial dilatation of the pupil, slight hyperæmia of the eye, and a slight increase of hemorrhage. He has observed no ill effects from its use, and regards it a good local anæsthetic for the eye, nose, skin, etc.

Dr. Chapin has witnessed the effects of this drug in two cases. The results were very satisfactory.

Dr. Leonard has observed notices of the use of cocaine in gynecological practice—some not favorable. The uterus is an unfavorable organ on which to test the usefulness of the drug. It might be very valuable in vaginismus.

Dr. Rouse: Muriate of cocaine might be of service in cases of hyper-æsthesia—possibly in pruritus. If it could be used successfully it might be of great service in dental surgery.

Dr. Shattuck: It would be very valuable in extracting teeth, and possibly might be injected. If it would destroy the sensitiveness of sensitive dentine, without injurious effects, it would be a bonanza to dentists.

Dr. Lundy suggested that it be tried on sensitive dentine, and arrangements were made for Dr. Shattuck to notify Dr. Lundy of a convenient time to-morrow to test its influence.

Dr. Yemans has seen several cases of its use in treating diseases of the urethra. For spasmodic stricture it might be of considerable service.

Dr. Lundy: The effects of this drug are too transient for prolonged operations. There are no indications that it is injurious to cut surfaces. Its price—sixty cents a grain—is very high. It will probably be cheaper soon.

Dr. J. G. Mulheron read a very interesting paper on micrococci in diseases, devoting especial attention to tuberculosis and its cause.

After the paper R. W. Reynolds exhibited a number of specimens illustrating the subject. The discussion on this subject was postponed till a future meeting.

W. H. ROUSE, M. D., Ph. C.,
Secretary.

DETROIT, Nov. 20th, 1884.

C. C. Yemans, M. D., Pres.; W. H. Rouse, M. D., Sec.

The Wayne County Medical Society convened this evening, with the President in the chair.

Dr. C. J. Lundy reported inability to test the effects of muriate of cocaine on sensitive dentine. He had, however, used cocaine with good results in over twenty rather severe operations upon the eye. In a case of iridectomy the patient gave no indication of pain. He has used it for the throat, for pruritus

ani, and for earache, in all of which considerable relief was obtained.

Dr. Leonard read a paper on "Neuromata of the Female Urethra." (See page — of this journal.)

Dr. Lyster is in favor of the galvano-cautery in the treatment of neuromata. In his practice he has not been troubled with hæmorrhage or recurrence of this ailment. He reported a case operated upon about three years ago. There had been two previous operations. The patient is now in good condition, though she was very anæmic at time of operation.

Dr. Douglass reported several cases, some of which caused much trouble.

Dr. Clarke reported a case in which the disease returned in about two years, when the cautery was used, and cure has resulted. Tenesmus is usually very troublesome, and if dilatation of the urethra will prevent its occurrence, it should be very valuable. In the cases he has seen there has usually been a history of specific disease.

Dr. W. Brodie has always regarded this disease due to specific disease, or to filth, and of rare occurrence. Eissure in ano has been treated by dilatation, but was not familiar with treating hæmorrhoids by this method. Will not dilatation of the urethra cause incontinence of the urine?

Dr. Lyster: The dilatation may facilitate cure by interfering with nutrition.

Dr. Douglass cited a case in which dilatation several times caused incontinence of urine.

Dr. Rouse reported several cases of neuromata in his practice.

Dr. Yemans has treated several cases; in one, coitus induced spasms.

Dr. Leonard: The cautery will cut through any tissue. It causes little or no pain or hæmorrhage.

Dr. Lyster reported that quite a number of cases of continued fever existed in the city. They are called malarial by some and typhoid by others. They usually continue three or more weeks, and occasionally prove fatal. In one case, a child, free hæmorrhage from the bowels occurred about the end of the third week.

Dr. Douglass has seen a number of cases of typhoid fever. There is usually a very dry tongue, delirium, coma, and relaxation of the bowels. Large doses of quinine have been given to some of these without benefit.

Dr. W. Brodie has seen no case of typhoid fever lately, but a number of continued or

remittent. These remittent usually continue three or more weeks, and are usually benefited by free doses of quinine with acid. The older writers lay much stress upon the eruption as a diagnostic symptom of typhoid fever.

Dr. Clarke reported an interesting case of hæmorrhage from the urethra, caused by the patient's attempt to pass a gum-elastic catheter. After trying various means of arresting the bleeding without success, he closed the point of an elastic catheter by ligation, inserted and then distended it with hot water. The hæmorrhage was promptly arrested.

Dr. Devendorf reported an interesting but severe case of diphtheria. One of the prominent symptoms was being tired.

Subject for the next meeting: "Diphtheritic Paralysis," with a paper by Dr. Chapin.

W. H. ROUSE, Sec.

Health in Michigan.

For the month of October, 1884, compared with preceding month, the reports indicate that influenza, tonsilitis, bronchitis, typhoid (enteric) fever, pneumonia, typho-malarial fever, and neuralgia increased, and that cholera morbus, cholera infantum, diarrhœa, dysentery, intermittent fever, and remittent fever decreased in prevalence.

Compared with the average for the month of October in the six years, 1879-1884, dysentery, diarrhœa, cholera infantum and cholera morbus were more prevalent, and intermittent fever and typho-malarial fever were less prevalent in the month of October, 1884.

For the month of October, 1884, compared with the average of corresponding months for the six years 1879-1884, the temperature was slightly higher, the absolute humidity and the night ozone were slightly more, and the relative humidity and the day ozone were slightly less.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of October, 1884, at 40 places, namely: Armada, Ann Arbor, Adrian, Albion, Big Rapids, Coldwater, Charlevoix, Detroit, Douglass, Edmore, East Saginaw, Fowlerville, Garfield, Grand Haven, Grand Rapids, Handy, Houghton, Hastings, Hartford, Howard City, Kalamazoo, Lyons, Port Austin, Lansing, Leelanaw, Marcellus, Muskegon, Meredith, Mendon, Manistee, Northport, New Buffalo, New Haven, Port Huron, Reynolds, Romeo, Sand Lake, Springwells,

Wyandotte, Whitehall. Scarlet fever at 19 places: Burr Oak, Coldwater, Columbiaville, Cadillac, Detroit, East Saginaw, Grand Rapids, Ishpeming, Jasper, Kalamazoo, Leelanaw, Manistee, Muskegon, Portland, Vicksburg, Wyandotte, Albion, Cedar Plains, Roxand. Measles at 6 places: Detroit, Cadillac, Ithaca, Marcellus, Whitehall, and Wyandotte.

HENRY B. BAKER,

Secretary.

LANSING, NOV. 7, 1884.

Correspondence.

The Old Way versus the New.

Editor Lancel:

Several years ago, while in one of the suburban villages of our State, I chanced to pick up a torn scrap of a doctor's day-book, but where it came from or who was the author I never could find out. It amused me exceedingly, and I laid it away as a curiosity. The other day I happened to find it, and will give it to your readers, with your consent, *verbatim et literatim et spellatim*. It is dated 1810, and is written on old-fashioned unruled paper, in a very fair style of ancient penmanship. It is part of page 68, and begins with the 15th of March, as follows:

1810. March.

15th.	Joseph How Dr. to travail and Emet Tart	0.24
15th.	Jonatha Pitney Dr. to Rhei	0.12
15th.	Curtis Hawley Dr. (by daughter) to Bitters and a box of pills.	0.34
15th.	John P. Bartlet Dr. to Tinct. Opi.	0.7
18th.	Amos Morse Dr. to vena sec.	0.12
19th.	James Stodard Dr. to travail Cal & Rhei	1.00
19th.	John P. Bartlet Dr. to ol Ricci.	0.19
20th.	Andrew Hurd Dr. to visit and cathartic	0.24
22nd.	Syrus Hurd Dr. to Bitters	0.24
22nd.	A Stranger Dr. to ol Ricci.	0.19

Then on the opposite side it goes on:

April.

1st.	Herman Baker Dr. to travail, cal. ol Ricci, Sal. Tart and Emet Tart	0.75
2nd.	Harmon Whitaker Dr. to senna & pink	0.25
3d.	Abraham Daton Dr. to Bitters	0.12
3d.	Herman Baker Dr. to vis & Em Tart	0.24
3d.	Harmon Whitaker Dr. to visit & cal.	0.50
3d.	Joseph Snow Dr. to travail cal Rhei, Emet Tart Crzo Tart & Epispassic	0.75
4th.	Joseph Snow Dr. to travail vena sec, cal pills, Emet Tart and Rad Glycy	0.84
6th.	David How Dr. to operatic obst.	

To this last the charge was torn off. It would really be a curiosity to know what it was.

This doctor was no tyro at least. He was evidently a man of education, to a certain degree, and knew how to keep books. He not only made the charge but at the same time itemized the account, and thereby indi-

cates the plan of treatment indicated in each case.

According to the dates he must have confined himself mostly to a cash business, or, contented himself with a very moderate income. How precise he was too. Every drug is figured to a cent. His list of remedies was somewhat limited, but they were energetic, and calculated to make a patient feel as though the hand of Providence was laid on pretty heavily.

In those good old days when a man could get bled for 12 cts., and purged for 19, he could afford to be sick, and doubtless put in his whole time, too, while he was about it. This doctor was also kind to the stranger, he took him in, but the item of prescription shows that it would have a tendency to make him search for solitude, and a good deal of it.

Finally, I would commend this old torn scrap of a day book, whose author, together with his patients, have doubtless long since "joined the majority." I say I would commend it to the countless throng of young and coming doctors, for their careful consideration, lest peradventure, they fall into the habits of certain Washington physicians, of whom it has been said that they charge "a dollar a grunt and two dollars a word."

E. B. WARD.

Laingsburg, Nov. 21, 1884.

ONTARIO, O., Oct. 28, 1884.

Editor Detroit Lancet:

The best local application to superficial erysipelas is muriated tincture of iron (full strength), brushed freely over the surface with a camel's hair pencil or a feather, about every two hours, till the pain and inflammation are fully controlled. It is also an excellent local application to frosted feet. In erysipelas use tincture of iron *externally, internally and eternally*, till your patient gets well.

R. F. WARK.

P. S.—Have used it thus eighteen years, with good success.

Dr. L. A. Dugas died in Augusta, aged seventy-eight. For fifty-two years he filled the chair of surgery in the medical college of Georgia. He has been prominent in his State society, and was editor of *The Southern Medical and Surgical Journal* for seven years.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Commissioner of Education's Report, 1882-83.

THIS bulky volume of eight hundred and seventy-two pages, represents the work done by this part of the general government. It contains a vast amount of information, much of it otherwise inaccessible to the public. The account of medical schools, while as good as usual, falls far behind that given by the State Board of Health, of Illinois, in its reports. But aside from this, there is much of interest even to the physician. The reports from the schools for the blind, and deaf and dumb, are full of suggestions. In discussing the history of medical education, the writer says: "The time has now come when the medical student pays to the medical college money for which he receives no calculable equivalent; he asks for bread and receives a stone. The really capable graduate is jostled, crowded, shouted down, and trampled down by a horde of unwieldy behemoths, who not only intercept most of the work that he only is able to do properly, but who supplement their scant incomes by arts and devices that his nature and training forbid him to join in. Having over-crowded all other departments of medical employment, many of these physicians, by the grace of the diploma, have lately taken up the work of opening and conducting medical colleges, much to the wrath and confusion of the older schools, who would dearly like to retain their monopoly of over-supplying the market with medical "spring chickens." We have no space to farther quote from this paper. In fact, all of the points taken, have from time to time been presented in these columns. Nor shall we forget to call attention to them as shall seem proper, from time to time, in our endeavor to right the wrong, and procure for the medical profession its best possibilities under existing conditions. We know that great advances have been made, but there is abundant reason for desiring still farther advances. Full description is given of the new Harvard medical school building. In the next volume we shall look for as full an account of the new Vanderbilt building, to be erected for the college of physicians and surgeons of N. Y., at a cost of half a million of dollars. Besides, we hope to hear of other millionaires devoting some of their surplus means to the endowment of

well established medical schools. Certainly the best conducted medical schools in this country have received the largest endowments. We fully believe that if all medical schools were conducted as honestly and as thoroughly as those, already endowed, all would receive endowments. But so long as a taint hangs over the conduct of medical schools, each individual school must demonstrate its fitness to receive an endowment before it will receive it.

Drainage for Health.

The relations of sewerage to disease are intimate and important. But the relations of soil drainage to health are quite as intimate and important. We have no doubt that much that is ascribed to sewerage is really due to defective drainage.

If the cellars and yards of all the houses of a city were perfectly drained so that no mold or mildew could thrive in them, most cases of infectious diseases would fail to find a soil in which they could thrive. Especially important is this consideration in view of the probability that cholera will be epidemic in the United States next year. So far as Detroit is concerned, we have seen more cause for alarm in damp and filthy cellars and undrained yards than in improper sewers.

Dr. R. C. Kedzie, in the *Sanitarian*, presents an elaborate and interesting paper upon the relation of drainage to health. He shows the need of free currents of air through all things found on the surface of the earth, metals alone excepted, in order that they retain a healthful state. Water, in large bodies, aerates itself by its constant motion under the influence of winds, gravity, etc. Soil free from excess of water also is purified by currents of air passing through it. Stones, bricks, mortar, all are purified in the same manner. But if the soil becomes filled with water, and no means of drainage be provided, then it cannot be purified by the air, nor can the water. Hence both become filthy in the full sense of the term, and undergo such decomposition as furnishes a fitting soil for the growth of disease. As an illustration he gives the following. It is not unique, as few observers have failed to notice similar examples, only they have not ascribed them to the same cause:

"Two brothers in Vermont, of strong and vigorous stock, and giving equal promise of a long and active life, married wives of corresponding promise of future activity. Both

became farmers. One brother built his house in an open and sunny spot, where the soil and subsoil were dry; shade trees and embowering plants had a hard time of it, but the cellar was dry enough for a powder magazine; the house in all its parts was free from every trace of dampness and mold; there was a crisp and elastic feel in the air of the dwelling. The farmer and all his family had that vigorous elasticity that reminds one of the spring and strength of steel. Health and sprightly vigor is the rule, and sickness the exception. The farmer and his wife, though past three score, have yet the look and vigor of middle life.

"The other brother built his house in a beautiful shady nook, where the trees seemed to stretch their protecting arms in benediction over the modest home. Springs, fed by the neighboring hills, burst forth near his home and others by his barns; his yard is always green, even in the driest time, for the life blood of the hills seemed to burst out all about him in springs and tiny rivulets. But the ground was always wet, the cellar never dry, the walls of the room often had a clammy feel, the clothes mildewed in the closets, and the bread molded in the pantry. For a time their native vigor enabled them to bear up against these depressing influences; children were born of apparent vigor and promise, but these, one by one, sank into the arms of the dreamless twin brother of sleep, under the touch of diphtheria, croup and pneumonia. The mother went into a decline, and died before her fiftieth birthday; and the father, tortured and crippled by rheumatism, childless and solitary in that beautiful home which elicits the praise of every passerby, waits and hopes for death."

Undrained soil is a veritable upas tree.

Guiding Principles of Surgery.

If one listens to the remarks of some surgeons with any attention his mind will become somewhat muddled as to the principles which guide the several operators in their decisions as to the performance of operations. Thus one will say that he did an operation simply to keep it out of the hands of a rival operator. Another says that he did an operation because the patient was well-to-do, and could pay a good fee. Another says he did an operation because it advertised him in the community in which he lived. Another says he did a certain operation in order to get

practice in the art of doing the operation. Others still say they never do an operation upon another person that they would not have done upon them, were they to change places with the patient. Beyond a doubt all the motives which sway men, in all callings in life, operate to determine the course of the several surgeons. Nor is it possible to have it otherwise, much as we might desire it. It is a knowledge of this fact that has much to do with the malpractice suits which surgeons are called upon to defend. If it were generally believed that every surgeon acted in accordance with a high regard to his patient and his profession, no jury could be found to convict a surgeon of malpractice.

But we do not care to discuss this matter now, only to direct attention to it by giving the utterances of Dr. Thomas Bryant of London, in a lecture published in the *Med. News*, Nov. 1. He says:

"If you are not sure of doing good, be very sure that you do no harm. The patient may die, but take care that he does not do so from any act of yours. Never be tempted to perform an operation from the pleasure it may afford you, or the benefit its performance may do you in the eyes of your neighbors, or the whip it may perhaps give you over a brother, and possibly a rival practitioner. The surgeon should never deviate from these rules in order to gratify a fancy or a desire to perform a named or favorite operation. He is never to look at his patient or the disease with a purely operative eye, which may suggest that the case before him is a good one for this or that operation, but to view it in a broad and clinical aspect, and solely with the necessities of the case before him. He is ever to look upon the case from his patient's point of view, and from no other, to do from necessity what the necessities of the case require, and to do what has to be done in the simplest and safest way.

Ever remember that patients are not subjects, but living human beings, with all their feelings, anxieties, responsibilities, and hopes, and that the great Christian principle of doing unto others what we would they should do unto us, is applicable in the practice of surgery as it is in the performance of the general duties of life. At any rate, gentlemen, if you let these principles of practice be your guides for the future, I can with confidence assure you that you will be travelling in the right road, and that in life you will win, as you deserve, success."

It would be a happy medical profession if

each surgeon would even try to practice these principles. But, alas! poor human nature is too weak, and hence the present state of things which each can at least see in others, if not in himself.

Pettenkofer on the Cause of Cholera.

Unfortunately we have not yet reached that stage in the study of cholera, in which all experts agree. In a late medical meeting Prof. von Pettenkofer is said (*Brit. Med. Jour.*, Nov. 1) to have made the following statements: "I think we have all good reason now to break with contagionist views of the spread of cholera. I declare openly that I must now uphold my localist point of view all the more firmly, and with all the greater conviction, as no proof has been brought against it even by Koch's investigations. An experiment ought now be made to see if cholera can really be produced by Koch's comma bacillus; hitherto experiments upon animals have been unsuccessful. I will, with pleasure, undertake to swallow bacilli cultivated by Koch himself, provided there is no predisposition to cholera (that is, that cholera is not prevailing), as is the case now in Munich. Wars have been fought, and men's lives have been sacrificed for objects of less importance; the enormous advantage is here so obvious, that the life of one individual is nothing in comparison to it. My example, which I repeat I would carry out with the greatest calmness, will find imitators. Twenty medical men could easily be found to follow, hundreds would join them afterwards, and we should be able to judge of the result. To make the experiment as perfect as possible, I will even acquire gastric catarrh. I value Koch's work as a bacteriologist very highly, and acknowledge his services in the fullest degree, but the conclusions which he deduces from his investigations I must directly dispute." There is no reason to suppose that Pettenkofer does not mean exactly what he says, and if so, then he gives the highest evidence of his convictions. Who is right? Meantime large numbers of persons have recently died in Paris from cholera. This makes it quite certain that during the coming year there will be a still larger number sacrificed to this plague, and that it will cross the Atlantic, and work its ravages in American cities. If we make our houses, our places of business, and our persons clean, it will find no soil in which it can grow and its harvest will be small. But we dare not hope for any such cleanliness of individuals and

communities. Hence we may expect to see the actual ravages of this disease.

No More Old Rags to be Imported.

The Secretary of the Treasury, under the date of November 15th, has issued an order in substance thus: "The unloading in the United States of old rags, shipped on and after the 21st inst., from foreign ports or countries, now or hereafter known to be infected with contagious or epidemic diseases, is hereby prohibited. France, Italy, and all Mediterranean and French ports are declared to be infected, within the meaning of this order. Old rags gathered or baled in infected ports or countries, are also prohibited from being unladen. No old rags shall be landed at any port of the United States, except on certificate of the United States Consular officer, at the port of departure, that such rags were not gathered or baled at, or shipped from any infected place or region contiguous thereto. This order takes the place of all previous orders, and continues in force until further notice. No old rags of any sort can be unloaded without the permit of the local quarantine or health officer.

This is all well so far as it goes, perhaps, but what shall we say of the rags that come over in the shape of emigrants? Certainly, these come in huge bundles, full of all sorts of infectious material. What shall we say of bales of merchandise, of all sorts, that come from French ports, and Italian ones too? Certainly the greatest caution should be observed to protect the people from the perils of cholera, but does the order we have quoted meet the indication? No provision is made preventing the shipment of rags from infected ports to non-infected ones, and thence to the United States. It is said that for three dollars per ton, rags can be completely disinfected.

Tuke on the Insane Asylums of the Province of Quebec.

Dr. Hack Tuke has published in the *Canada Medical Journal* the observations made by him during an examination of the private insane asylums in the Province of Quebec. The story is almost beyond belief in its horrors: Thus he saw many patients with straight jackets, mittens, manacles and anklets, others strapped to chairs—body, hands and feet—simply as a matter of economy to prevent them from tearing their clothes, and

to lessen the number of attendants. The refractory wards were crowded in the highest story under the roof, having no sufficient ventilation. Many patients were confined in dark cells, some quite naked, others clothed, but having nothing to lie or sit upon but the bare floor. Most were manacled. The narrow corridor which served for day room, exercise and recreation ground, was also crowded with patients, restrained by handcuffs, manacled, or strapped immovably to restraint chairs. He terms this part of the asylum St. Jean de Dieu, the "chamber of horrors;" a veritable pandemonium and human menagerie. Neither of the institutions visited had any resident medical officer. The death rate in both hospitals was large, and the number cured small.

These abuses have long been known, as they have been exposed by the *Canada Medical Journal*. Protests from medical men have also been made, but thus far the government does not seem to have been reached. It is to be hoped that the letter of Dr. Tuke will excite sufficient interest among the people to compel the government to take cognizance of the matter, and bring about the changes demanded. It is wrong in principle for the government to let out the care of the insane to private parties by contract. But should it do so it is bound to see that the contract is fulfilled, that the patients have decent quarters and common sense treatment.

Tobacco Smoke.

There is a diversity of views respecting the effects of tobacco smoke. Beyond a question these effects are different in different individuals, at different times, under varying physiological and pathological states. The latest contributions to the study of this drug are by Dr. Zulinsky (*Brit. Med. Jour.*, Oct. 25, 1884). He made a large number of experiments upon men and animals to ascertain the physiological effects of tobacco smoke. He found that tobacco smoke was a powerful poison, even in small quantities. In man, if not inhaled too freely, it is deleterious only to a certain extent. He finds that the poisonous qualities of tobacco smoke are not due solely to nicotine. If the smoke be deprived of nicotine it is still poisonous, though to a less degree. The other poisonous principle is an alkaloid of the pyridine series, collidine. Tobacco smoke contains also carbonic oxide, hydrocyanic acid, and other noxious principles.

In cigar smoking, the greatest amount of poison is inhaled, in cigarettes much less, in pipes still less, while those who draw the smoke through water, take tobacco in its least harmful form. Much of the light colored tobacco has been partially bleached by some process. It is believed that the decolorizing agent is a harmful compound. Dark tobaccos are probably the most wholesome for smoking when unadulterated. Tobacco smoking is an all but universal habit, so that attention to its dangers is a matter of general importance. Still most will smoke under any circumstance. They will even smoke when they are compelled to choose between the loss of sight or the loss of their favorite indulgence. To prevent smoking requires attention to the very young boys. If they can be induced to avoid forming the habit, the future holds out the prospect of diminishing the use of a powerful drug in this manner.

Lister's New Surgical Dressing.

In an address before the London Medical Society, Sir Joseph Lister describes his latest surgical dressing. He tells us how he became disappointed in the results obtained from carbolic acid and oil of eucalyptus dressing, owing to their volatility. Being attracted to corrosive sublimate from its powers as a germicide, he assayed to use it, but he found that it was too irritating. He then combined it with albumin, and dissolved this compound in an excess of serum. The solution still retained all the germicide properties of the corrosive sublimate, and was free from irritant qualities. At least a gauze of a one-per-cent. solution was entirely non-irritating. A two-per-cent. solution became slightly irritant. So intimate is the blending of the salt with the serum, that no crystals can be detected when it is dried. The action on it of perspiration does not render it irritating. If water acts on the dried sublimated serum, it does not dissolve it, as serum does, but renders the mass opaque. Hence the soaking of perspiration into the dressing does not produce irritation though it moistens it.

Lister says the expense of this dressing is slight. It is only necessary to have the blood of the horse stirred while it is coagulating, so as to separate the clot. This affords several gallons of serum. This is mixed with corrosive sublimate in the proportion of one to seventy-five, or one to one hundred.

A large number of experiments are given

in the full address, which we have abstracted from the English weeklies.

Curiously, just at this time, we have reported a number of cases of poisoning from sublimate solutions of one to one or two thousand. But the practical results to be obtained from the new dressing described, will be looked for with interest.

Death from Trying to Suck out the Obstruction to the Tracheal Wound in Diphtheritic Laryngitis.

Dr. Samuel Rabbeth, Medical Officer of the Royal Free Hospital in London, England, lost his life by the senseless practice of sucking the trachea of a child upon which he had operated for the relief of a laryngeal diphtheria. The child died and then the doctor. The number of victims to this practice is already so large as to call for an earnest endeavor to stop it. The worst is that only the best young medical men are thus lost. If some of the numbsculls were destroyed in this manner it might be less occasion for lament. But such men keep their mouths away from the throats of diphtheritic patients.

Then it should be borne in mind that as the lungs form a closed cavity, more or less irregular, it is impossible to suck anything out from its only opening. The proper way to do would be to force some air into the lungs by a Davidson's syringe, or some other measure as a soft catheter, inserted into the wound, and then the lungs inflated by the breath of the operator. The excitation of the lungs thus induced would usually suffice to bring about such a respiratory effort as to free the wound and trachea of all obstructing secretions. Besides this would be entirely safe for the operator as well as patient. If a surgeon will only perform the experiment of placing his mouth over the mouth of a large bottle and try to suck out the contained air, we think he will be at once cured of the desire to suck out the foreign matter in the child's trachea with his mouth. In fact he will find it simply impossible to do more than reach the air at the immediate opening.

Why do not the Philadelphia Medical Schools Select Their Teachers from Among Their Own Graduates.

The graduates of Jefferson and the University of Pennsylvania, complain because their alma maters do not regard them good

enough to furnish material for the several professorial chairs as they become vacant. One of them writing to the *Journal of the Am. Med. Association* says: "We are led to this view by the recent selections in two of the schools. The Jefferson has always preferred to import her professors, and perhaps she knew so well the calibre of her graduates that she had reason to look elsewhere. Bartholow, from Cincinnati, Parvin, from Indianapolis, and lastly, Mallet, from Virginia, are simply late samples. But now comes the University, whose trustees are compelled to look to a foreign land for the occupant of a chair. Even the almshouse has had to import from England its head nurse. This in spite of the fact that Philadelphia has long had a training school for nurses. It is hoped that after a time, with the aid of imported teachers, these institutions may be able to so educate some of their students as to be able to furnish their own supply of teachers."

All this may be true, still to an outsider it seems as if the choice was made, not for the reason mentioned so much as from the desire to haul in the ducats which these teachers will bring to the pockets of the remaining teachers. To get the benefit of their former labors in distant fields is a profitable thing.

Memoranda.

In Paris all epidemics except scarlet fever have increased since 1865.

On Nov. 11th Dartmouth Medical College graduated eighteen doctors.

The *British Journal of Homœopathy* ceases with 1884. It was one of the oldest journals of its class.

Dr. Austin Flint, jr., having sold his physiological library, has entered upon the active practice of medicine.

The number of students who have entered the London medical colleges for a complete course is nearly six hundred.

The chief commissary of the U. S. says that he never knew or heard of any poisoning from canned goods in the army.

A correspondent of the *Med. Record* says that the attendance upon the medical colleges of Cincinnati has fallen off about thirty per cent.

The health officer of Chicago reports malignant epidemic diphtheria on the west

side of Chicago, and in various parts of the State.

Dr. Neumann, professor of psychiatry at Breslau, died Oct. 10th, aged seventy-one. He was a leading authority in mental diseases.

Dr. H. B. Baker, of Lansing, says that the prevention of typhoid fever can be stated in four words: "Stop drinking contaminated water."

The training school for nurses of Charity Hospital graduated twenty-one, Nov. 12th. This is the eighth class which has left the school.

It is stated that thirty per cent. of the births in Cincinnati are attended by midwives—still the city contains almost five hundred physicians.

Prof. Luigi Somma died Sept. 19th, of cholera, in Naples. He was a well-known pædiatrist and editor of the *Archiv. di Patologia Infantile*.

The late Countess Bose, of Cassel, left the University of Berlin one hundred and ninety thousand dollars for the benefit of the poor students of medicine.

Twenty physicians died during the cholera epidemic in Naples. This is about one in six of those engaged under the auspices of the White Cross society.

Dr. C. R. Agnew says that in eye diseases he does not use nitrate of silver in any form, and rarely sulphate of copper. Other milder remedies give better results.

Dr. A. N. Bell says that "the essentials for healthy stove heat are a brick-lined fire chamber, an exhaust flue for foul air, and provision for fresh air supply."

Dr. James F. Reeves, of West Virginia, was elected President of the American Public Health Association. The next meeting will be held in Washington, December, 1885.

Dr. Dickinson, U. S. N., Mare Island, Cal., reports a case of dilatation of the heart, attended by ascites, from which, during seventeen months, he drew nearly half a ton of serum.

McDade's formula for the relief of syphilis has fallen into disrepute from its failure to cure the disease. The old remedies are returned to their former place in the materia medica.

Genuine oil of eucalyptus differs from the adulterated, in that it mixes with ninety per cent. spirit, does not change color with iodine, and turns yellow when treated with sodium.

The corner-stone of a crematory temple was laid November 20th, at Mount Olivet, Long Island. Twenty bodies are waiting its completion, to be returned to their original elements.

The Calcutta Medical College has received a gift of \$75,000 towards providing separate classes for the training of female medical students. If a separate college be provided, \$400,000 is promised,

The court of appeals, of West Virginia, has decided that the medical practice act of that State is constitutional. Hence, the State Board can continue its excellent work with the highest endorsement.

The *Northwestern Lanet* has passed from the control of Dr. Owens to that of Dr. Chas. B. Witherle. Good as it has been in the past, we doubt not that it will keep pace with all the advances of the future.

Our old friend, Dr. H. F. Campbell, has been lately successfully operated on for cataract. Hence, he will be in seeing order for the booming meeting of the American Medical Association, of which he is president.

Dr. Crichton Brown says that from actual examination he finds that forty-six per cent. of the school children of London suffer from habitual headaches. What is the matter? No healthy child should have habitual headache.

An exchange remarks that, "rich folks do not hire poor doctors to cure them. A doctor to cure rich folks must live in a fashionable street, in an expensive house, and elegant style." Too true! "That's the way the money goes."

The N. Y. elevated R. R. has just paid a judgment of two hundred and fifty dollars for an injury to a man's eye from the fine steel filings caused by the use of breaks. An appeal to the higher court has affirmed the decree of the lower.

Dr. Samuel M. Bemis died Nov. 17th, aged sixty-three. He was professor of the Theory and Practice of Medicine in the University of Louisiana. During the epidemic of 1878, he was the representative of the National Board of Health, in this city.

Dr. T. A. Emmet says that his operation has fallen into general abuse. "Everybody is performing it, and very few are doing it with any purpose, except to close a fissure. The operation should never be done without there are marked symptoms calling for it."

The *Chicago Medical Examiner* records the death of a young man from chloroform narcosis, while having an injured hand dressed. All care was taken in the administration of chloroform. Four deaths have lately been reported from Billroth's clinic, due to chloroform narcosis.

P. Blakiston's Visiting List appears for its thirty-fourth year. It has all the advantages of past issues, and some new ones better adapting it to the needs of the practitioner. It comes in nine different forms, suited for all possible conditions of practice. For sale by John Macfarlane, Detroit.

A National conference of the several State Boards of Health will be held in Washington the second Wednesday in December. It is called in view of the great probability of the cholera epidemic reaching the United States next year. We shall look with interest for the result of the conference.

Dr. Herman Von Zeissl died in Vienna, September 23d. He was a famous teacher in the ranks of Skoda, Rokitansky, Hebra, etc. As syphilographer he was known to all medical students and the profession the world over. His works on syphilis are well-known, and will transmit his name to coming generations.

G. P. Putnam's Sons announce the early publication of Meynert's Treatise on Psychiatric. The first volume, treating of the anatomy and physiology of the brain, they will issue at the beginning of 1885. The edition has been edited by Dr. B. Sachs, with the author's consent. It will be fully illustrated.

The *Medical and Surgical Reporter* estimates that in Philadelphia alone, two millions of pounds of ammonia, derived from urine, goes to waste each year. Of the value of the organic waste from other sources it does not speak. But it does complain that the health of the people is being impaired by this enormous waste.

The muriate of cocaine relieves the turgescence of the venous sinuses incident to an ordinary cold. The relief lasts for from

twelve to twenty-four hours. The remedy is used in the form of a spray. Bosworth calls attention to its value in this regard, and a considerable observation enables us to confirm his statements.

Cincinnati has two general medical societies. The Faculty of one of the largest medical colleges belongs to one society, and the Faculty of the next largest medical college belongs to the other. Both do excellent work. But the mass of the profession belong to neither medical society, as in all other large cities, or for that matter, country too.

Dr. Maylard (*Glasgow Medical Journal*), in reporting a fatal case from anaesthesia, presents the following questions to the profession: "Have our patients from some cause become more susceptible to the influence of the drug? Is the constitution of chloroform the same at the present time as years ago? Is our method of administration free from all possible danger?"

The *Pacific Medical Journal* says that, "Every month it receives reports of cases containing material that would be useful to the profession, but they are so full of errors in spelling, and so devoid of attempts at composition, as to render them unavailing for publication." It further says that most of the papers are from men who have graduated elsewhere than in California.

Dr. J. B. Roberts, of Philadelphia, (*British Medical Journal*) says that he has been shown the demand of a graduate of a Philadelphia medical school citing him to appear before the State Board of Health of Illinois, and be examined before he could practice medicine in Chicago. Papers good enough for Philadelphia are not sufficient for Chicago. Humiliating, as Dr. Roberts says, to Philadelphia.

M. Martilis, in *Lyon Med.*, says that being presbyopic, if he desires to read without his glasses, he presses with the pulp of his index-finger rather deeply between the external border of the orbit and the globe of the eye, on that part covered by the upper lid, making somewhat firm pressure. During the continuance of this pressure the characters become visible and he is able to read with ease.

When the Italian government asked the Italian physicians to take care of the cholera-stricken, they replied that when the government would place them upon the same basis as officers of the army, they would willingly enter the jaws of danger. If, for the public

good, it was needful for them to court death, then the public must pension their families in case they died. Obviously the physicians are right.

George J. Manso, *Med. and Surg. Reporter*, says that "in old times the word 'drug store' indicated an establishment where simply drugs were kept. Now you can go to many drug stores and purchase cigars, tobacco, canes, umbrellas, tea, coffee, stationery, confectionery, and many kinds of fancy articles. Formerly the profit was fifty per cent., now it probably averages twenty-five to thirty per cent."

Wood's Medical Record Visiting List is out for 1885. If possible, it is more convenient and handsomer than ever. Sixteen pages contain all needful text. This includes such facts as are most likely to be forgotten, and yet desirable to have in hand at all times. The price for sixty patients per week, in red or black seal skin binding, is \$1.50, for thirty patients \$1.25. For sale by John Macfarlane, Detroit, Mich.

The *Annals of Surgery* is to be resuscitated again. It will be edited by Dr. L. S. Pilcher, of Brooklyn, N. Y., and Dr. C. B. Keetley, of London, England. It will be published simultaneously by Smith, Elder & Co., of London, and J. H. Chambers & Co., St. Louis, Mo. It will appear monthly, and contain from eight to one hundred pages. It will be issued at five dollars a year. The old *Annals* was a good journal, and we doubt not that this will be even a better one.

The publishing committee of the transactions of the Texas State Medical Association, under the head of "some uncommon cases in my practice," publish three pages and one-half of most disreputable stuff, and then state that the greater part of the contribution was omitted because they could not make any sense or connection to several pages. The whole would better have been omitted. The lack of all sorts of education is most apparent in large numbers of published articles.

It is stated in the secular papers that a medical college in Indiana has been compelled to pay two thousand dollars for the robbing of a grave to secure subjects for dissection. We presume the demonstrator of anatomy was the one that got the body, and that the college paid for his work. They did not appeal to the profession to pay it, as has been done in the interests of a rich eastern

medical college. The law held the college responsible for the stolen body found within its walls.

About six thousand persons are believed to have died during the cholera epidemic at Naples, Italy. The notoriously bad hygienic conditions there existing, doubtless make the epidemic so fatal. Into many of the streets the sun never enters, so narrow are they and the buildings so high. They are damp and foul looking and fouler smelling. Many of the people live in cellars, thousands live huddled together, ten or fifteen in a single room, without distinction of sex, and eating the most miserable food.

Dr. Henry Gibbons died Nov. 5th, aged seventy-six, at his old home, Wilmington, Del. Since 1850 he has been a resident of California. He aided in the founding and conduct of the California Medical College, and the *Pacific Medical Journal*. Through the last named publication he has probably become best known to the medical profession. He was an active member of the Society of Friends. His career was marked with sterling uprightness in all regards, and an active hatred of all that was evil.

Major Robinson, in the *Sanitarian*, answers the question: What are the model dwellings? "Small plots of civilization in the wide waste of barbarism. In what does this civilization consist? In very simple matters. The sub-soil drainage of the site of the building; the free admission of light and air to each room inhabited; the abolition of the cesspool, involving complete house drainage; an abundant supply of water, and the immediate removal by it of all house refuse not capable of suspension in water. This is all."

Dr. Henry Lamb, of Rochester, N. Y., has given the American Public Health Association two thousand dollars, to be distributed as prizes next year, for the four best essays contributed during the year. The subjects of the essays are also given. It would have been more to the purpose had he offered the whole amount for the best original essay on some given subject. Then there would have been some inducement for one to do some good original work. As it is, the money will be simply wasted, in giving it to the usual mediocre papers read before this body.

A new remedy for whooping cough is announced in a city of fifty thousand people,

and noted for the general intelligence of its people. The writer has observed the small number of deaths from that disease, and finds that it is owing to the extensive use of his remedy. This is the remedy: "Take a live catfish, and when the child begins to cough place the mouth of the catfish in the child's mouth; keep it there till the child stops coughing. The breathing of the catfish is what does the work. It requires only a few applications to effect a cure."

The celebrated Oppolzer advised an invalid, after a hasty examination, to go to Pistyan, in Hungary, and take the waters. After a few months the same patient returned to Oppolzer, much worse in all respects, saying that he had returned from the Pistyan springs. The professor, who had entirely forgotten him, examined him carefully, and, with some anger, asked what confounded ass had advised him to go to those springs, as it was the worst thing he could possibly have done. Better not comment before patients upon the advice they have received from other doctors.

The *Lyon Medical* tells the story of a priest who was appealed to by a woman, for advice respecting the propriety of her taking a mixture of cubebs and copaiba, which a doctor had prescribed for her gonorrhœa. The priest examined the prescription and exclaimed: "Balsamics, those are used for the chest. Yours is weak. You can take them." And being of a generous nature, he wrote across the prescription: "Furnish at my personal expense." At the drug store where this prescription was filled, there is still a sly smile to be noticed as this prescription is inspected.

Dr. James F. Reeves, in the journal of the American Medical Association, devotes attention to the water supply of the upper Ohio river. He finds that as a rule, each town drinks the sewerage of the town next higher on the stream. Thus, Bellaire, just a half mile below Wheeling, is supplied by water pumped from the Ohio, at a point half a mile below the spot at which Wheeling dumps its night soil and other corrupting refuse. In short, Bellaire drinks the filth of Wheeling as far as it can be dissolved in water. As a fact, typhoid fever prevails alarmingly in all these towns.

The circuit court of Washington has decided that money must be refunded if paid to a doctor on condition that he cures a patient.

The case which called for this decision was briefly as follows: A man called Dr. W. H. Hale promised a colored man named Meredith that he would cure his son of consumption for one hundred dollars, and in case he failed he would refund the money. The boy died, and Meredith sought for his money. It was given him in judgment by a justice's court. The higher court reaffirmed the decision of the lower. The doctor's guaranty was to perform an impossibility.

The *College and Clinic Record* gives three reasons why all doctors should take an active part in some medical society. "The proper use of medical societies keeps one polished and out of ruts. Membership should be had in medical societies for the aid it gives one's self." "The profession, as a profession, needs the help of the humblest of its members. A meeting and comparing of ideas, a friendly criticism and seeking for the reasons of things, all help to strengthen the individual powers of each." "The fact is to be emphasized that every physician owes it to himself, his patients, and the public, to be actively engaged in the sessions of at least one medical society."

The *Courier-Review Call Book* is the name of a new applicant for professional favor. It was arranged by Dr. E. M. Nelson, of St. Louis, Mo., and is published by J. H. Chambers & Co., of the same place. It is about the size and shape of the *Walsh Call Book*, so popular some years ago. It is arranged by months. All the valuable memoranda, associated with this class of publications are found here. It will serve an excellent purpose to such as desire its aid. Our only objection to it lies in the fact that the publishers have placed in it the advertisements of such preparations as "Tongaline," "Celerina," etc. It strikes us that this feature is quite objectionable.

Our own observations have convinced us that cocaine is liable to start a severe inflammation in the eyes of some debilitated persons. We have noticed in four persons such an inflammation. In one case, an old man of eighty-four, there was a severe interstitial corneitis; in one case, a corneal ulcer, and in two, quite severe conjunctivitis, with considerable haziness of the cornea. We notice in reports three cases of sloughing of the corneal flaps after cataract extraction. We have no doubt that in many cases the after-effects

will be found quite unsatisfactory. Just now all reports are favorable, and enthusiasm is at its highest pitch. But reaction will come, and the other side of the drug will come to light.

The report of the British Cholera Commissioners, Drs. Klein and Gibbs, shows that the comma bacillus is found in the mouth, fauces and dejecta, both of cholera patients and of those who have not cholera. It does not appear that they found these bacilli producing any poisonous material. In cholera, persons examined immediately after death showed only small numbers of comma bacilli in the intestines. Again, the cultivation of the comma bacilli found in other than cholera cases presented the same phenomena as the cultivation of the bacilli found in cholera cases. Hence the British commission have been unable to confirm the distinctive features claimed for the comma bacilli found in cases of cholera.

Henry C. Lea's Son & Co. announce the preparation of an American System of Practical Medicine. It will contain five volumes of about one thousand pages each. The first volume is to appear Feb. 1st, 1885, and the remaining volumes to follow at intervals of about four months from each other. Dr. William Pepper is the editor. The list of contributors includes many of the names prominent in connection with the subjects discussed. The work is to be sold by subscription only. The price is the same as for volumes of similar size, viz., per volume in cloth, \$5; in leather \$6; in half Russia, \$7. Unquestionably this work will meet the hearty approbation of the profession at large, and enhance the interests of practical medicine, and those who labor for it.

The Nov. issue of the *Pacific Med. Jour.* contains a letter from its senior editor Dr. Henry Gibbons. As will be seen by a note elsewhere the author of it was dead before his letter was printed. He came east to his old home to die. Yet the letter written at the age of seventy-six indicates no sign of failing strength, of body or mind. It seems by his letter that he came east by way of Detroit. He says "Among other places Detroit has taken a forward rank; it is lighted by electricity. An extensive and attractive pile of buildings attracts your attention, and you are informed that it is the chemical and pharmaceutical establishment of Parke, Davis & Co. You might think it large

enough to turn out sufficient medicine for our sixty millions of people."

The New York County Medical Society has ordered a committee to report upon a plan for inducing delinquent members to pay their dues. It works well to have a by-law by which membership is forfeited if the dues are not paid, at least before the end of the second year. It is well, also, if to this is added the statement that membership is forfeited by a member failing to take some part in a regular meeting for more than three months. It is quite as important for himself that each member do something at each meeting as it is that he pay his dues. The personal contribution of brains is worth more to the society than the money dues. If societies are in earnest to advance the real interests of their members, they will consider propositions which shall compel them to work.

Dr. T. Wharton Jones, in the *London Lancet*, says that he has investigated the subject of inflammation, and reached the following conclusions: "The white corpuscles do not emigrate from the interior of blood vessels by forcing their way through the vessel's walls. When these leucocytes are found in the extravascular tissues, the true explanation is, not that they have abandoned the vessels, but that the vessels have become destroyed, and left their contents uninclosed. Thus the free leucocytes are the result and not the cause of the inflammatory process. The supposed white corpuscles so often described and figured as being caught in making their way through a vessel's wall are not white corpuscles at all, but merely nuclei in the wall of the capillary." Wonderful discovery—if it is true.

Dr. J. E. Garretson (*Bost. Med. Jour.*) says: "I compliment the man who in this dollar-and-cent age directs attention to the flaws of American medical education at the expense of his pocket. A full half of the young men who come to Philadelphia to study medicine should be turned face about and sent to a village school." Dr. Benjamin Lee, of Philadelphia, says that to become a blacksmith requires an apprenticeship of six years, while to become a doctor requires of the same material but two years. But three medical colleges demand as high literary requirements of their students as was demanded one hundred years ago. He then quotes many eminent medical educators, that a classical education is far better for the preliminary training of a

medical man than any other course. The strong expressions used to convey this idea were to us quite a revelation.

The *Toledo Blade* tells the following story of a new interpretation of the phrase so often used by doctors, "Take this medicine in water." A German entered a drug store, and asked for some medicine for certain malaise. He was given a mixture of quinine, whiskey, etc., labeled take in water before breakfast. After some time he returned to express his thanks to the clerk. He said that at first he stripped off and got into a tub of water, and took his medicine in that way. As the tub was small and water scarce, he finally walked about a mile to a creek, and, going up to his neck in the water, he took his medicine. This brought on a violent cold, but by perseverance both the cold and the original trouble disappeared. The clerk had great difficulty in keeping a sober countenance while explaining his mistake. The feelings of the patient can be better imagined than described.

The *Berlin Klin. Woch.*, commenting upon the appointment of Schweninger to the position of Professor of Dermatology in the University of Berlin, says, "Dermatology in recent years, thanks to the exertions of a series of noble specialists, has been formed into a much more extensive branch of medicine as regards scope and depth in comparison with former times, and for its treatment an extensive practical experience is, perhaps, more necessary than for any branch. It is in precisely this branch that technical dexterity is necessary, which can only be acquired after long training in the clinics. He who is made the representative of this branch at a short notice without this training, begins to practice at the expense of the patient, the students and the good reputation of the University." He passes by the name of "Prince Bismarck's doctor."

Wm. Wood & Co. announce a new work called "Reference Handbook of the Medical Sciences." It will consist of from six to eight volumes, containing about eight hundred pages each. As will appear from the title, it is intended to deal with the science of medicine, rather than with the art. Again it will be a reference book, rather than a text-book proper. Into it will be crowded all of the material possible to compress within such limits as proposed. Its scope thus appears to be quite different from that of most books issued, especially of late. The

different subjects will be discussed by gentlemen having the time and ability to do so thoroughly. The book is issued in the belief that enough physicians take an interest in the science of medicine to warrant the publishers in issuing the work. It will be sold by subscription only. The price per volume will vary with the binding, from six to eight dollars.

A Buffalo medical journal says "There is in Buffalo hardly a physician, old code or new, allopath, homeopath, Eclectic, or midwife but that smiles all over when he sees a reporter coming towards him. He stops all business and imparts all he knows on the subject he is questioned on. Not only that but many of them rush with all speed to the telephone or newspaper office to report an accident, no matter how slight, and inform the reporter that Dr. So-and-So was called. We also see repeatedly in the papers, reports of skillful operations performed, all skillful, very skillful, no matter if the operation consists of merely amputating some member of the body. The journal in question thinks the practice a good one as it gets more business for the poor, and enlarges the business of the rich doctor. All do it and all are happy. For ourselves we think the entire statement unworthy of credence. We do not believe that the medical profession of Buffalo has sunk so low.

Editor's Book Table.

Althaus on Sclerosis of the Spinal Cord.*

For twenty-five years Althaus has been an investigator in the field of nervous diseases. In the work before us he endeavors to gather up all the known facts respecting sclerosis of the spinal cord, and present them in a connected form so as to be more readily comprehended. Gaps still remain to be filled up, and these are well exhibited to the investigator as he reads this work. But in spite of these gaps, the account here presented will furnish such aid to the real students that but

few mistakes need be made in the recognition and treatment of this malady. Then in this as in other affections the earlier the diagnosis can be made out the more favorable is the prognosis. With most the diagnosis of spinal sclerosis is synonymous with a death warrant. But the facts are that many excellent observers report cures of cases of undoubted spinal sclerosis.

What does the author mean by spinal sclerosis? "An irritant morbid process, standing intermediate between inflammation and simple atrophy, which invades certain well-defined and evolutionally, anatomically, and physiologically distinct areas or systems of that organ; and which lead in the course of time to degeneration and wasting of the nerve tubules, very generally to partial or complete destruction of the axis cylinder, and to overgrowth of connective tissue." Of all the terms used to designate this affection he prefers that of "tabes dorsalis." As illustrating the manner in which different areas of the spinal cord act under the influence of morbid agents, he directs attention to the effects of different poisons upon the cord." Bread contaminated with ergot of rye will, when habitually taken for some time, cause well marked disease of the posterior columns. Bread containing an admixture of the lathyrus cicera, which is eaten by the lower classes in India, Algeria and Italy, will lead to equally striking disease of the lateral columns. Strychnia has a special influence in exalting the excitability of the gray centre of the cord, and bromide of potassium diminishes it. Lead when absorbed for some time consecutively, will cause gradual disintegration of the large ganglionic cells of the gray anterior cornua, and thus lead to a peculiar form of muscular atrophy." He gives a most careful description of the development of the different conducting paths in the spinal cord. These are developed in an absolute manner, one after the other. Those which are most important for the life of the fœtus are early developed. Those which place the spinal cord under the influence of the brain are evolved at a later period. These latter are more developed in man than the lower animals, and are not formed at all in congenital absence of the brain, or in destructive disease of the motor area of the same. Anomalies of growth no doubt influence the evolutions of various diseases and form the basis of what is termed a neurotic constitution. As persons are born to be

*ON SCLEROSIS OF THE SPINAL CORD, INCLUDING locomotor ataxy, spastic spinal paralysis, and other system diseases of the spinal cord, their pathology, symptoms, diagnosis and treatment. By Julius Althaus, M. D., M. R. C. P. New York: G. P. Putnam's Sons & Co. 1884. Cloth, pp. 294. Price, \$2.75. For sale by John Macfarlane, Detroit.

statesmen, artists and criminals, so persons are born to be sclerosed. These latter are in general the descendants of the syphilitic, the gouty and the drunkards. In the chapter on tabes he shows that the anatomical as well as the clinical features of tabes are of a very complex character. In different cases they vary greatly. As yet the law of their grouping has not been made clear. Hence it is premature to express any positive or dogmatic view of the nature of the disease. Respecting the causation of sclerosis he shows that it is induced by eating bread containing the ergot of rye, and of the lathyrus sativus. But a far more potential cause is syphilis. Thus out of sixty-six cases of tabes observed by the author, fifty-nine had a syphilitic history. Other writers give a like high percentage of cases of tabes originating from syphilis. Of the other causes of the disease we cannot speak. They are at best rare. But the practical point to be remembered is that every case of syphilis should be treated until entirely well, and thus avoid the chance of the patient's being attacked with tabes.

The difference between the several stages of tabes is well pointed out by the author; but they run imperceptibly into one another, as there is the simple difference of a less or greater number of nerve tubules destroyed in the posterior columns.

The three symptoms of greatest note are, the loss of knee jerk, lightning pains, and reflexory rigidity of the pupil. These symptoms are dwelt upon and illustrated with great fulness by the author. The origin of the reflexory rigidity of the pupil he thinks situated more centrally than the lenticular ganglion, as Hutchison thinks, and at a point where the centres of the muscles of the eye are close together.

As to the cause of the ataxic symptoms in tabes he says: "We may take it as an indisputed fact, that the symptom of locomotor ataxia is caused by an interruption of the paths between the posterior roots and the central ganglia of the brain, through sclerosis of the posterior column, and that static ataxia is in turn brought about by an interruption of the paths between the posterior roots and the cerebellum, through sclerosis, either of Goll's columns or of the direct cerebellar strands."

The other symptoms are given with almost exhaustive fullness, and yet in a very clear and succinct manner.

As to prognosis, he thinks it more favorable than in former years. As our knowledge of

the disease increases, he thinks that it will get still better. If there be a suspicion of syphilitic taint, the patient must be subjected to anti-specific treatment. Especially, in view of the relation of syphilis to the production of tabes, it is most important that more care, if possible, be taken in its thorough treatment. With mercury and the iodide of potassium we can treat the cases of tabes originating in syphilis. In the other cases we have as remedies to stimulate the nutrition and functional activity of the nerve tubules, electricity, nitrate of silver, and the ergot of rye. Of course, it may not be expected that we can cure the fully developed malady, but we can in the beginning of some cases produce great improvement, and in a few, recovery.

Every physician should read this book, as it deals with a subject difficult to grasp, and yet so presents it as to come within the easy comprehension of all. Besides, it is of the greatest moment that all physicians be posted as to the latest facts as to the beginnings of this disease. Only when cases are recognized at an early day can they be treated successfully.

Van Buren's Lectures on the Principles of Surgery.*

This volume is printed from the manuscript which Dr. Van Buren used in his last lectures to his students at the Bellevue Hospital Medical College. No person who has ever heard him lecture will for a moment doubt that these lectures were penned by him. Each year they had been altered by the author to meet the changes which progress had brought to the subjects taught. Hence they expressed his personal judgment of the state of progress at time of revision. Able and successful as he was in everything he undertook, these lectures were also able and instructive. More than this, they were entertaining, to any cultured listener.

The book before us we regard as a veritable classic. We have read with delight every page, and regret that there are not more to read. Few surgeons have had his general culture and power of broad thought, accurate judgement and attractive style of speech and pen. No doctor can read it without pleasure

*LECTURES ON THE PRINCIPLES OF SURGERY, delivered at Bellevue Hospital Medical College, by W. H. Van Buren, M. D., LL. D. Edited by L. A. Stimson, M.D. New York: D. Appleton & Co. 1884. pp. 588. Cloth. For sale by John MacFarlane, Detroit.

and every student can read it with both pleasure and profit. The more general culture they have the greater will be their appreciation of the master piece they are reading. Of course these lectures do not cover the entire range of the field of surgery, but only such portions as his experience taught him were the most important to medical students who attended his courses. The work is edited by Dr. L. A. Stimson. We venture to quote a few paragraphs from different portions of the work. Thus, referring to the selection of a specialty, he says, "His specialty, to be exercised legitimately must be the outgrowth of an education possessing honest claims to completeness, and, at the same time, of fair capacity, if necessity should arise, to practice the medical profession in any of its branches." "The student who entertains the ultimate purpose of becoming a specialist must grasp the whole curriculum fairly and honestly, or he will inevitably become a fractional member of the profession, and can never practice a specialty on a legitimate basis." Can any person become a surgeon? He replies, "It may be said, without fear of contradiction, that since the introduction of anæsthetics into the practice of surgery, any man with fairly acute senses, an honest purpose, and a sound and promptly acting mind, who has made himself accurately familiar with anatomy, may make a good surgeon of himself; by means of adequate study and training may acquire the power of saving life in what are called surgical emergencies."

What is surgery? "It is the name given to that department of the science and art of medicine which takes charge of all those diseases and injuries requiring in their treatment especial training or dexterity in the use of the hands, or of instruments to supplement the hands."

What are surgical affections? "They are simply those which require surgical remedies, *e. g.*, the use of instruments, apparatus, or operation in their treatment."

What should be the equipment of the surgeon? "He should have all the knowledge of the physician. In addition to a more perfect and practical familiarity with the details of surgical anatomy, the surgeon should possess, in a large degree, physical vigor, courage, presence of mind under circumstances of danger and excitement, and a fair amount of manual dexterity."

What shall be done if in the amputation of a limb the arteries be found carious? "It

sometimes happens, in amputating the limb of an elderly person, that you will meet with an artery—generally one of the tibials—so thoroughly degenerated by calcification of its coats as to crackle and give way under the constriction of the ligature. In this case a little conical plug of soft wood may be fashioned off hand, a ligature attached to its base, and its point inserted into the gaping mouth of the artery with force enough to retain it in place."

Shall sutures be applied to scalp wounds? "I feel justified, after using them for forty years, in expressing the opinion that they do not tend to cause erysipelas. Erysipelas is due to a special poison, probably also of the nature of microscopic fungoid germs, which assume active vitality only under certain circumstances which arise under the influence of defective hygiene."

What is the treatment of dissection wounds? "It is preventive even more than curative. We must avoid getting ourselves into the state of health in which the system becomes sensitive to those noxious influences and unable to throw them off. Crowded quarters and late hours are to be avoided; the selection of good food, regularity in habits, daily ventilation of the blood by exercise in the fresh air, and in the sunshine when feasible, cleanliness and temperance, are to be strictly observed. Before exposing the hands they should be rubbed with vaseline and balsam of Peru, or carbolic acid. When a wound is received, if of ever so slight a character, the part is to be promptly cleansed and subjected to suction by the mouth; when bleeding has ceased good court plaster is to be carefully applied, and the part kept entirely at rest. I think the local use of caustics more likely to do harm than good."

If the system become involved the internal use of quinine, alcohol, and opium in proper doses are called for. Poultrices, the actual cautery, the reduction of tension by the knife and the early opening of abscesses are to be employed as occasion calls for them.

Wagner On the Nose.*

During the past fifteen years the study of the diseases of the nose has created a new literature. Among all the workers in this field, perhaps none has had greater opportu-

DISEASES OF THE NOSE. By Clinton Wagner, M. D., New York. Bermingham & Company. 1884. Cloth, pp. 252. For sale by John Macfarlane. Price, \$2.50.

ities, or better improved them, than Dr. Wagner. The work before us gives the profession the results of this work. One chapter is devoted to the anatomy of the nose and nasal fossæ, one to the physiology of the nose, one to instruments, one to the use of these instruments, and the rest of the book to the discussion of the several diseases of the nares, and their treatment, medical, surgical, or otherwise. Many excellent illustrations are given of the normal and diseased appearances described, which help the reader to comprehend the subject. In discussing the adenomata of the pharynx, he gives cases showing that "surgical interference is wholly unnecessary when hearing and nasal respiration are not interfered with." Farther, these growths atrophy after puberty.

He quotes several cases in which death followed the attempts to extract a naso-pharyngeal polypus with a forceps: In Dupuytren's case death resulted from hæmorrhage, and in J. C. Foster's case it resulted from fracture of the cribriform plate of the ethmoid bone. The better and safer modes of dealing with these growths are fully described. Among the rarities are the cases reported of parasites in the nasal cavities.

Loss of the sense of smell is not uncommon from organic disease of the nares, but the loss of it from simple over-use has been rarely reported. He gives a case of a flour inspector, who, without any organic lesion to be detected by present methods of examination, lost the power of distinguishing the odor of flour. All other odors were as keenly perceived as ever. When he first began his work, his power to detect the different grades of flour by the sense of smell was quite remarkable. But the constant use of it seemed to have been attended by its entire loss. Wagner locates the lesion in the nerve supply.

The reflex cough produced by the introduction of probes, etc., into the nares, has been studied by Dr. Makenzie. From his study he finds in many persons a sensitive area, located always upon the posterior end of the inferior turbinated bone, and the portion of the septum immediately opposite. From these experiments he concludes: In cases where reflex cough exists, these are the parts chiefly if not solely involved. The act may be produced here at will by artificial stimulation of the parts invaded by the morbid process. It may be dissipated by local applications to, or removal of the membrane covering the diseased surface. Foreign bodies, such as coins, lodged in this area, sometimes give rise to

cough, which latter is not observed when they become impacted in other portions of the nose. Polypi give rise to reflex phenomena only when they arise from, or impinge upon, the sensitive portions of the area. Where complete atrophy of the turbinated structures exists, as, for example, in ozæna, reflex cough is not present, nor can it be produced by artificial stimulation.

We have not space to farther call attention to the interesting and oftentimes curious facts presented by the author. Surely the book will find a place in every library.

Leffmann's Compend of Organic and Medical Chemistry.*

"The merits of such books as this," the author tells us, "lie only in the accuracy and perspicuity with which the facts of the science are detailed, and in the proper adjustment of the space assigned to different topics." These words in the preface led us to examine somewhat more carefully than common the contents of this little volume, in the hope that we should find in this exceptional instance something that would be of real assistance to the student—not a mere *eselsbrücke*. We confess that our hope has not been realized. Of course it would be impossible to compress into 110 pages duodecimo any complete outline of the facts pertaining to physiological chemistry alone, with which the graduate in medicine ought to be perfectly familiar. In this compend, however, we find page after page taken up with the elucidation of chemical theories, which to the physician are of no possible use, while cane sugar, glucose and starch altogether receive scarcely more than a page; glycogen is dismissed in five lines, albumin in four, peptones in three, casein in two, and fibrin in one.

After four pages devoted to the consideration of compound and substitution ammonias, amines, amides, etc., we find less than four pages given to the vegetable alkaloids, which are individually treated in the most summary manner. In regard to morphine, for example, we are told that its formula is $C_{17}H_{19}NO_3$; it

*A COMPEND OF ORGANIC AND MEDICAL CHEMISTRY, including Urinary Analysis and the Examination of Water and Foods. By Henry Leffmann, M.D., D. D. S., Prof. of Chemistry in Penn. College of Dental Surgery, etc. Quiz Compend Series, No. 10. Pp. 124. Philadelphia: P. Blakiston, Son & Co., 1884. For sale by John MacFarlane, Detroit, Mic. Price, \$1.00.

is obtained from opium, and it forms crystals, slightly soluble in water. Positively this is all that the candidate for a diploma is expected to know about the most important, perhaps, of all the alkaloids.

An entire page, however, is given to the subject of ptomaines, but of what use will it be to the physician to know that "eight classes of ptomaines have been described, the classification being based upon a comparison to the properties of well-known vegetable alkaloids?" or to be able to assert that "some are precipitated (!) by ether from acid or alkaline solutions, and some only precipitated by amyl alcohol or chloroform?" We fear that if this last statement were offered in court by an expert witness, other experts would exchange significant glances—and, if inimical to the witness, would put a flea in the ear of the cross-examining attorney.

About 20 pages are given to the important subject of urine analysis. We find, however, here, as elsewhere, great partiality shown towards certain especial subjects. Urinary sediments receive about 20 lines. The following is the "summary of characteristics," which the author appears to consider sufficient for all practical purposes: "A sediment has no significance unless formed within 20 hours after the urine has been passed. Every white crystal is a phosphate or oxalate; the distinction may be made by the microscope. Every yellow crystal is uric acid, if the urine be acid, or a urate of it be alkaline." Positively this is all, except that we are told that: "Uric acid is generally in lozenge- or boat-shaped crystals; urates are in indistinctly crystalline (sic.); phosphates are generally in distinct prismatic crystals; oxalates in small regular octahedra."

We are told that phosphoric acid is best estimated by ammonium molybdate, although "a volumetric process with uranium solution is used, but it is difficult to obtain reliable results with it." Johnson's method of estimating sugar by means of picric acid is given in extenso, no reference being made to either Fehling's solution or the indigo papers of Dr. Oliver, as means of making this important estimation. The indigo test is spoken of as Oliver's test; it is true that it has recently been brought into prominent notice by Dr. Oliver, but it has been described in all the books on this subject, for ten years past at least, as Mulder's test. To make up for all deficiencies, however, in quantitative testing, the author has given us six pages nearly, of detail in regard to the estimation of urea.

The student may spend his money to much better advantage than in the purchase of quiz compends of any kind, but it will be worse than wasted if invested in compend No. 10.

Vital Statistics of the State of Michigan from 1877 to 1881.*

For a long time the preparation of the vital statistics of Michigan has lagged greatly. But the last legislature made provision for the speedy completion of the work. The result is that we have before us five volumes covering as many years, in all bringing the publication up to 1882. It is to be hoped that hereafter the reports will be issued as soon as the data are collected. While it cannot be claimed that these reports are perfect, it is certain that they are as good as could be obtained under existing regulations. In looking over the births of twin children we find that the plural births vary but little from year to year, being about one plural birth to every one hundred single births. The average of the illegitimate children is about one to every ninety-five born in wedlock. The black race produces the greatest number of illegitimates. Of marriages there were in 1881 one to every one hundred and fourteen persons in the State. During 1881 there were twelve males and one hundred and fifty-one females who were married under legal age. One case is returned from Saginaw in which the bride was but twelve and the groom twenty-two. This marriage was performed in East Saginaw by John McEldowney, minister of the gospel, so it is stated. The penalty for solemnizing such marriages is a fine of five hundred dollars and a year in the county jail. It is safe to say that the reverend gentleman paid no such penalty. In fact, there seems to be utter ignorance or disregard of all the laws on this subject. It shows the popular disregard of the marriage laws. As exhibiting the different ages at which people marry, it is reported that a man of seventy married a woman of twenty-two, and a man of thirty-five married a woman of sixty-six. The death rate for 1881 was sixteen and nine-tenths to one thousand of the inhabitants.

These volumes will afford a mine of information to such as seek for this sort of knowledge.

*ANNUAL REPORTS RELATING TO THE VITAL STATISTICS of Michigan from 1877 to 1881 inclusive. Five volumes. Lansing, Mich.: State Printers.

Robinson's Manual of Dermatology.*

The author tells us that this volume is intended as the basis of a larger, more pretentious and more original work. As this contains 647 pages, the future work must indeed be a large one. In the present volume he aims to give a concise account of our present knowledge of dermatology. Although he has done much work in the field of histology of the lesions of many skin diseases, the limited space at his disposal has prevented him from giving this to the profession now.

In the first 52 pages, he discusses, in a general manner, the anatomy and physiology of the skin; the symptomology of skin diseases; their etiology; their diagnosis; their treatment and classification. Then he proceeds to consider the anomalies of secretions and excretions; the hyperæmiæ; the exudations; the hæmorrhages; the hypertrophies; the atrophies; the neoplasms; the neuroses and the parasites. His classification will be inferred from the above list of the chapters.

The descriptions of diseases are excellent, so that from them none should have difficulty in recognizing typical cases. The account of the apathological anatomy of the several diseases is excellent, and the treatment is that generally approved of by the writers on these subjects. Altogether it is an excellent work, helpful to everyone who consults its pages for aid in the study of skin diseases. No physician who studies it will regret the placing of it in his library. Medical students, also, will find no better aid to their study of skin diseases. It is handsomely printed on excellent paper, and is a credit to both author and publisher.

Parrish's Pharmacy.†

Parrish's Pharmacy has been so long recognized as the best text-book on the subjects of which it treats, in the English language, that

*A MANUAL OF DERMATOLOGY. By A. R. Robinson, M. B., L. R. C. P. & S. New York: Ber-
mington & Co. 1884. Cloth, pp. 647. For sale
by John Macfarlane, Detroit.

†A TREATISE ON PHARMACY.—Designed as a text-
book for the student, and as a guide for the physi-
cian and pharmacist, containing all the official, and
many unofficial formulas, etc., by Edward Parrish,
late Professor of the Theory and Practice of Phar-
macy, in the Philadelphia College of Pharmacy,
etc. Fifth edition; enlarged and thoroughly revised
by Thos. S. Wiegand, Ph. G., with 256 illustra-
tions; pp. 1090; large 8-vo. Philadelphia: Henry
C. Lea's Son & Co., 1884. For sale by John Mac-
farlane, Detroit, Mich.

it is quite superfluous for us to say any word
in its praise.

So rapid is the progress of scientific dis-
covery in every department of chemistry, that
a thorough revision of every practical treatise
like the present, must be made as often as
once in five years, in order to avoid the
opprobrium of perpetuating obsolete hypo-
theses, and a phraseology that implies anti-
quated ideas of chemical philosophy. The
recent revision of the United States Pharma-
copœia, of course, rendered imperative a new
edition of the present work, corrected to date,
in its formulas as well as in its scientific
theories.

Difficult as is this task, it has been satis-
factorily accomplished, and the work still
holds its place as a complete guide and com-
panion for the practical pharmacist, com-
prising nearly every item of information of
which, in his professional capacity he could
have need. In its systematic arrangement of
matter, in its lucid treatment of the details of
manipulative operations, and in its concise
descriptions and definitions, the work re-
mains, as it has ever been, a model.

**Murrell on Nitro-Glycerine, as a Remedy for
Angina Pectoris.***

This remedy has been before the profession
for many years, as of value in certain cases of
neuralgia. Dr. Murrell brings together his
old knowledge, and adds to it much of origi-
nal observation and experiment. Especially,
he reports many cases of angina pectoris,
treated by this remedy. Specific directions
as to dose symptoms, etc., are added. Those
desiring farther knowledge of this drug will
do well to consult this little book.

**Annual Report of the National Board of
Health for 1883.†**

This contains reports from refuge stations,
a report on operations at New Orleans, and
one of operations at Memphis, Tenn. Six
reports are given from as many districts of
immigrant inspection service. Eight reports
from consuls in various foreign countries.

*NITRO-GLYCERINE AS A REMEDY FOR ANGINA PEC-
toris. By William Murrell, M. D., M. R. C. P.
Detroit, Mich.: Geo. S. Davis, Publisher. 1882.
Cloth, pp. 78.

†ANNUAL REPORT OF THE NATIONAL BOARD OF
Health for 1883. Washington: Government Print-
ing Office, 1884. Cloth, pp. 226.

The facts contained in these reports have long since become public property, and there is no need to repeat their substance here. To the report is attached petitions to the Congress, etc., of the United States, on the part of numerous medical and sanitary associations, calling for the re-establishment of the powers and privileges of this board. These petitions have, as yet, not been answered. The Marine Hospital Service still holds the power once vested in this board. A change has come over the political horizon and perhaps a better state of things will exist under a new administration.

Eggert On the Treatment of Uterine Displacements.*

The subject matter is presented from the homœopathic standpoint. Whether this is the best presentation that can be made from this standpoint we cannot tell, we refer the query to such as are especially interested in the subject. The book does not present a very attractive appearance to the casual observer.

Murrell on What to do in Cases of Poisoning.†

This is a very small book, but it contains much information which cannot be too fully impressed upon the mind of every practitioner. Though it contains no new thing, it states the old things forcibly and attractively.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Obstetrics.

THE INFLUENCE OF AGE UPON THE LABOR OF PRIMIPARÆ.—Kleinwachter, from the records of nine hundred and twenty cases at his clinic at Innsbruck, has studied this subject (*Bost. Med. Jour.*, July 17th, 1884). He divides his cases into three classes, according to their ages. The first class includes those under twenty years, the second those under thirty years, and the third those under forty-

one. These several groups he terms young, middle-aged and old. He concludes as follows:

Accidental complications, which have nothing to do with pregnancy, occur least often in the youngest primiparæ and most frequently in the old.

Ailments attributable to pregnancy are observed most frequently in the old, and next most frequently in the young.

Hæmorrhages in the course of pregnancy occur most frequently in the young and least frequently in the old.

The duration of labor is most frequently abnormally protracted in the old; in this respect the young stand next to the old.

Inefficient labor pains, on account of which labor is abnormally protracted, are least often observed in primiparæ in the bloom of their sexual life, and most frequently in the old.

Therefore, forceps must be used most frequently in the old and least often in the middle-aged.

The lengthening of the labor of primiparæ with the increase of age occurs chiefly in the first stage; the second stage is scarcely affected by differences of age; the third stage is not at all affected.

The mortality per cent., after forceps operations on primiparæ, rises parallel with the increase of age.

The older the primiparæ, the greater the danger of perineal laceration.

The older the primiparæ, the more likely a post partum hæmorrhage, although the frequency of hæmorrhage is by no means so great as hitherto supposed.

With increase of age is increased the tendency of primiparæ to affections of the kidney.

The frequency of œdema without kidney disease is also increased by age.

The older the primiparæ, the less the danger of mastitis, and the less also the ability to suckle.

The old most frequently, the middle-aged less frequently, sicken and die of puerperal fever; the same is true of puerperal mania.

The morbidity and mortality per cent. is highest in the old and lowest in those from twenty to twenty-nine years old.

Spontaneous labor, premature, occurs very frequently in old primiparæ, and least often in the middle-aged.

With increase of age the frequency of abnormal positions of the fœtus increases.

The older the primipara is, the more likely

*THE TREATMENT OF UTERINE DISPLACEMENTS. By W. Eggert, M.D. Second edition. Duncan Bros 1884. Cloth, pp. 136. Price, \$1.00.

†WHAT TO DO IN CASES OF POISONING. By William Murrell, M. D. Second edition. Geo. S. Davis, Publisher, Detroit, Mich. 1883. Cloth, pp. 96.

is she to bear a boy, except only those from twenty to twenty-one, who bear more girls than boys.

The liability to twin pregnancy in primiparæ increases with age; so does the frequency of bearing deformed children diminish, while the mortality of the first born increases.

Gynæcology.

DANGERS FROM THE OPERATION FOR LACERATED CERVIX UTERI.—Dr. Wells (*Amer. Jour. Obstet.*, June, 1884,) concludes a very able discussion of the facts presented by the several large operators, thus:

Primary hæmorrhage, though not uncommon, is rarely alarming, and when severe is easily controlled by traction exerted upon the cervix, or by one or more sutures passed deeply under the bleeding points.

Secondary hæmorrhage is rare, but when it does occur it is a serious danger. When it does occur, a deep suture should be at once applied, twisted tightly on the side from which the bleeding comes. When this cannot be done, tight tamponing with discs of alum-cotton will suffice and not interfere with union.

It is a question whether it would not be wiser to operate first upon the lacerated cervix, and then upon the perineum, after the first operation has been recovered from.

The occurrence of menstruation before the removal of sutures does not necessarily cause trouble if they be allowed to remain in situ a few days longer, or until it ceases.

Non-union occurs in eight per cent. of all operations, the percentage of failures being larger in hospital than in private practice. It may be due to a flabby, hyperæmic condition of the cervix, or to too many or too tight sutures.

Serous inflammation is a not very infrequent sequence, and even death occasionally follows.

Inflammation frequently occurs where there has been previous cellulitis.

Ophthalmology.

EYE SYMPTOMS IN DISEASES OF THE SPINAL CORD.—Dr. W. R. Gowers (*Lond. Lancet*), in an address before the Ophthalmological Society, London, calls attention to two eye symptoms met with in spinal disease. These are "optic nerve atrophy" and "internal ocu-

lar paralysis." The first generally comes under the notice of the ophthalmic surgeon, and the latter under that of the physician. He says "we must regard these symptoms as associates, and not the effects of the spinal lesion." These symptoms are always the result of degeneration, and their presence shows that the cord disease is also degenerative. Of all the degenerative spinal diseases, with locomotor ataxy alone are these eye symptoms associated, and they may exist for years previous to the locomotor symptoms. He thinks that the percentage of eye symptoms in this disease is about 15.

The internal muscles of the eyeball, of the iris and ciliary muscle, may lose their power of action in association with spinal disease. The most frequent condition is loss of reflex action to light, while the pupil still contracts on an effort at accommodation.

These studies of eye symptoms in tabes dorsalis are interesting and important, especially as they may precede even the loss of the knee-jerk.

Laryngology.

MACKENZIE ON THE TREATMENT OF GOITRE.—Dr. Morrell Mackenzie (*Brit. Med. Jour.*, Sept. 6) presents the conclusions of his study of this subject thus:

After pointing out the great importance of distinguishing the various kinds of goitre, and excluding exophthalmic goitre, he makes the following propositions:

1. Simple goitre of recent origin, and occurring in young persons, can, in the absence of endemic influences, generally be cured by the administration of iodide of potassium, and, in many cases, by counter-irritation.

2. Fibrous goitre is best treated by parenchymatous injections of iodine.

3. Cystic goitre can be most readily cured by conversion of the cyst into a chronic abscess, which is effected by emptying the cyst, injecting a small quantity of a solution of chloride of iron, and allowing it to remain within the sac for three or four days.

4. When the cyst is of considerable size, it should not be emptied at once, but should be tapped two or three times before the injection is used.

5. Removal of the thyroid body is a dangerous operation, which should never be performed for mere cosmetic purposes, nor even for the relief of urgent dyspnœia, except when less radical measures have failed.

THE ANATOMY OF THE TONSILS AND THEIR DISEASES.—Dr. Bosworth (*Brit. Med. Jour.*) in a paper read at various societies, gives his views thus: The tonsils are simply a group of glands in the fauces, and not almond-shaped organs with fibrous investing sheaf, etc., as anatomists describe them. Anatomically, physiologically, and pathologically, the pharyngeal tonsils are identical. The same diseases are met with in each, with the exception of quinsy, which is not a tonsillitis, but a phlegmonous inflammation of the areolar tissue of the soft palate or pharynx. The diseases of the tonsils are catarrhal tonsillitis, acute follicular tonsillitis, and hypertrophy of the tonsils. There is but one treatment of hypertrophy of the tonsils—excision. This is best done by the guillotine. He also calls attention to the fact that the upper portion of the pharynx is anatomically different from the lower portion. It is designed for the transmission of air, and for the secretion of lubricate solid and liquid food. Hence its mucous membrane is poor in glands, and has pavement epithelium covering. The paper is one of far more than average interest.

Therapeutics.

NERVOUS DISEASES TREATED BY THE INTERNAL ADMINISTRATION OF HOT WATER.—Dr. A. L. Ranney (*Bost. Med. Jour.*, Oct. 23, '84) thinks highly of this agent in the treatment of nervous affections. He gives the following rules for its administration:

The water may be taken in doses of from one goblet to one-and-a-half. The dose must be modified according to its effects. It must be taken hot and not warm (from one hundred and ten to one hundred and fifty degrees Fah.), and, if necessary, fifteen or more minutes may be consumed in sipping a goblet full. Wooden cups prevent the water from cooling rapidly. If there is obstinate constipation, Carlsbad salts, or other laxative, may be added to the morning dose. The dose must be taken an hour and a half before each meal and again at bed time. The temperature of the water should be increased as fast as it can be borne. The hot water must be kept up with great regularity for at least six months in order to get its full effects. The dose should be determined largely by the specific gravity and general character of the urine. The object of the treatment should be to bring the specific gravity to the standard of health and keep it there. The use of cold fluids in the form of beverages must be abso-

lutely prohibited. A restricted diet is often necessary to the full effects of the treatment in some forms of nervous derangements. The condition of the subject in respect to flesh is to be the guide, as a rule, to the character of the diet prescribed, provided that marked disturbances to digestion or diabetic symptoms are not to be combatted. He related many cases in which he thought the favorable results were due to the use of the hot water.

Surgery.

THE TREATMENT OF CHANCER BY SALICYLIC ACID.—Von Hebra (*L' Union Med.*) says that he successfully treats chancre in from four to five days by salicylic acid. The virulence of the ulceration is destroyed in a couple of days, and the rest of the time devoted to the repair of the destroyed tissue. His method is as follows: The penis is first carefully cleansed by tepid water. Then by oil and soap he removes the crusts and pus, etc. Upon the cavity thus produced the salicylic acid is carefully applied, care being taken that the acid does not touch the sound tissue. This powder is kept in place by means of a thin layer of wadding, and the whole fixed by a ring of adhesive plaster. If the suppuration be not abundant, it will suffice to dress it once a day. If there be much suppuration, it will need dressing twice a day. There is no pain from the treatment, and it has the positive advantage of suppressing adenitis, chancrous buboes.

FOREIGN BODIES IN THE AIR PASSAGES.—Dr. J. R. Weist (*P. Trans. Amer. Surg. Society*) gives the results of a study of one thousand cases of foreign bodies in the air passages. From these data he gives the following conclusions:

1. When a foreign body is lodged either in the larynx, trachea, or bronchi, the use of emetics, or similar means should not be employed, as they increase the suffering of the patient and do not increase his chances of recovery.
2. Inversion of the body and succussion are dangerous, and should not be practiced unless the windpipe has been previously opened.
3. The presence simply of a foreign body in the larynx, trachea or bronchi does not make bronchotomy necessary.
4. While a foreign body causes no dangerous symptoms, bronchotomy should not be performed.
5. While a foreign body remains fixed in

the trachea, as a general rule, bronchotomy should not be practiced.

6. When symptoms of suffocation are present or occur at short intervals, bronchotomy should be performed without delay.

7. When the foreign body is lodged in the larynx, there being no paroxysm of strangulation, but an increasing difficulty of respiration from œdema or inflammation, bronchotomy is demanded.

8. When the foreign body is moveable in the trachea and excites frequent attacks of strangulation, bronchotomy should be performed.

NÆVUS TREATED SUCCESSFULLY BY LIQUOR ARSENICALIS.—Mr. W. Beatty (*Lond. Med. Rec.*) in the *Brit. Med. Jour.*, notes that he has had great success in the treatment of nœvi by the local application of arsenic. The preparation used is the ordinary liquor arsenicalis of the Brit. Pharmacopœia, with which the nœvus is to be painted night and morning until ulceration takes place. The cure is effected in from three to five weeks.

HUTCHINSON ON HIGH AMPUTATION FOR SENILE GANGRENE.—Mr. Jonathan Hutchinson, in a paper read before the Royal Medical and Chirurgical Society on high amputations for senile gangrene (*Brit. Med. Jour. : Lond. Med. Record*) urged the safety and expediency of amputating in these cases, if the operation were done at a good distance from the disease. The author operated on several very old patients, with recurrence of the disease in only one case. The chances of spontaneous cure, he thought, were very small. Thin patients were the most favorable subjects to operate on.

SCHMIDT ON URETHRITIS IN MUMPS.—In a case of mumps the author (*Arch. de Méd. Milit., Lond. Med. Record*) observed on the third day a discharge from the urethra, which lasted the same time as the swelling of the parotid gland. There was no orchitis, and the patient had not exposed himself to contagion. The discharge was ascribed to a specific inflammation of Cooper's, Mery's, and Littre's glands.

CLARK ON A CASE OF OBSTRUCTION OF THE BOWELS TREATED BY ABDOMINAL SECTION.—Mr. H. E. Clark, of Glasgow (*Lond. Lancet, Lond. Med. Record*), reports a case of obstruction of the bowels occurring in a man aged 32. There was a history of a stoppage of the bowels for seven days. On the third day there was so much distention of the

abdomen from gas that puncture was performed, affording great relief. Enemata were frequently given, but nothing was brought away. On the sixteenth day, after colopuncture had been done on several occasions, laparotomy was decided upon. On opening the abdomen, an enormously distended portion of the bowel came into view, and by passing the hand into the pelvis, constriction was easily made out, occupying the lower part of the rectum. It then became evident that the distended portion was colon, and that this had become twisted by the sigmoid and descending portions passing around the upper part of the rectum. By twisting the enlarged portion, so as to make three half turns from right to left, the constriction was easily removed, and it was noted that no structural change had taken place in the portion of the bowel so constricted. The next question was how to reduce the bowel so constricted, so as to allow of its being returned to the abdominal cavity. This was done by employing enemata by means of a Davidson syringe. Large quantities of olive-oil and warm water were used at first, but it was found that injections of very warm water alone proved most effectual in evacuating the fæces contained in the bowel. Eventually the intestines were returned, and the wound stitched up. The patient made a good recovery, leaving the hospital after five weeks.

A CASE OF IMPERFORATE RECTUM IN WHICH LUMBAR COLOTOMY WAS PERFORMED.—Dr. John H. Packard records, in the October number of *The American Journal of the Medical Sciences*, a case of imperforate rectum in which lumbar colotomy was performed with an unsuccessful result. From his experience he is now of the opinion that in cases in which the object is to open the bowel with a view not only to immediate relief, but to the subsequent establishment of the natural passage and closure of that artificially made, inguinal colotomy is the better operation. His preference for the operation in the loin was based upon a belief in its greater safety, as well as upon his familiarity with it as practised upon the adult. But the risk involved in opening the peritoneal cavity, as well as the somewhat greater difficulty of the operation, would seem to be outweighed by the advantage of far readier access to the cul-de-sac forming the terminal part of the gut, and by the better prospect of thus remedying the abnormal condition.

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Original Communications.

Recent Improvements in Urinary Analysis.

BY A. B. LYONS, M. D., DETROIT, MICH.*

PART II. TESTS FOR ALBUMIN.

AMONG the recently proposed tests for albumin, the following are especially worthy of attention :

1. Acidulated brine, proposed in 1882 by Dr. Roberts (LANCET, Oct. 14, 1882); a fluid ounce of dilute hydrochloric acid, B. P. is mixed with a pint of a saturated solution of common salt in water, and the mixture filtered. The reagent must be added in excess to the specimen to be tested, and is said to be at least equal in sensitiveness to nitric acid. It has, however, one important advantage over nitric acid, in that it is not the least corrosive, so that it may be readily carried in a cork-stoppered bottle, and in case of accident there is no danger to the clothing or to the fingers. The same specimen may also be tested afterwards for sugar by Fehling's test. The indications of the brine test, however, are not infallible. Dr. H. B. Millard says of it, "I have frequently found the brine test, used by Heller's method, to show a clear, white line like that produced in albuminous urine by nitric acid, where the existence of albumin could not be shown by any unmistakable test. Besides, it has no advantages over certain other absolutely positive and accurate tests." (*Medical Record*, May 31, 1884.) This reaction is doubtless due to the presence, in the specimen tested, of parapeptones.

2. Potassio mercuric iodide, Mayer's reagent for alkaloids, introduced twelve years ago (1872) by M. Tanret, of Lyons, as a test for albumin. Corrosive sublimate 13.5 grammes and potassium iodide 32.2 grammes are dissolved in distilled water sufficient to make 800 c. c., and to this solution is added 200 c. c. of glacial acetic acid. The urine to be tested is placed in a test tube, and the reagent allowed to flow gently into the tube from a pipette so as to overlies it. The reagent

may be carried also in the solid form, the salts being simply pulverized together, and when required for use, a minute quantity of the powder may be dissolved in a few drops of water. The acetic acid of Tanret's formula is then to be replaced by citric acid, which may be carried also in powdered form, and thus the physician may be provided with the means of making his tests at any moment. In employing this test in this form, it is best to add the citric acid to the urine and then add the reagent. Some recent experiments of Dr. Purdy, of Chicago, show that in sensitiveness this test surpasses either heat or nitric acid, at least as an indication of the presence of serum albumin. For the albumin of the egg, it seems that no tests are more delicate than the familiar heat and nitric acid tests.

3. Picric acid. This was proposed as early as the year 1872 by M. Gallipe, but has only lately come into prominence as a reagent in urinary analysis, through the writings of Drs. Johnson, Pavy, and Oliver. The acid may be employed in the form of a powder, or a saturated solution in distilled water. Where the former is used, it is only necessary to dust over the surface of the urine to be tested a minute quantity of the powder, having first added to the urine some citric acid. In case albumin is present, a yellow, opaque cloud forms as the picric acid dissolves. If the urine is free from albumin, the acid in dissolving merely tinges it strongly yellow. The saturated solution is employed in precisely the same manner as the mercuric reagent.

Dr. Purdy found the picric acid about equally sensitive as a reagent for albumen with nitric acid, but it has the great advantage of portability. Both this reagent and that last named precipitate many of the vegetable alkaloids from acidulated solutions, so that the presence in the urine of such an alkaloid, e. g., quinine, may lead to erroneous conclusions if the test be not supplemented by the application of heat. The alkaloidal precipitates dissolve when heated, while the albuminous cloud is rendered only more distinct. It is not likely that there will ever be

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found enough of any of the vegetable alkaloids in the urine except those of cinchona bark to lead to mistakes, but in using the tests this possibility must always be borne in mind.

Alcohol also dissolves precipitates of alkaloids produced by the mercuric reagent, rendering the albuminous precipitate only more distinct. Picrates of the alkaloids, however, do not dissolve readily in alcohol, and cannot, therefore, be always discriminated in this way. Picric acid and Tanret's reagent also precipitate peptones. Heat clears up the precipitate with the latter reagent, not in all cases with the former, hence the mercuric reagent is to be preferred.

3. Ferrocyanide of potassium can not be called a new test for albumen, since it has been used for several years, not only as a qualitative, but also as a quantitative reagent. It has, however, been recently brought into prominence among the test papers that have been already alluded to, and it deserves a place among these bedside tests from the circumstance that it does not precipitate alkaloids or peptones, even in the cold, as do the two last mentioned. At the same time the reagent is at least as sensitive as nitric acid, and may easily be carried in the medicine case in the form of a powder. It may be used in precisely the same way as the picric acid, but it is much more soluble, and the solution is heavier than normal urine while the picric acid solution is lighter. It is better, therefore, to pour the urine into the tube containing the reagent, so as to form an overlying stratum.

Citric acid is to be used with this reagent as with all the others. Dr. Pavy uses sodium ferrocyanide, which he forms together with citric acid into pellets or compressed tablets. Heat must not be used in conjunction with the ferrocyanide test, for the reason that on heating in an acid solution the salt decomposes and renders the fluid turbid even when albumin is not present. For rough quantitative estimates of albumin, also, the reagent is recommended by Dr. Purdy. A measured quantity of urine is mixed with the ferrocyanide, with the usual addition of citric acid, and is set aside a few hours in a graduated tube. The bulk of the precipitate after the lapse of twelve hours, serve to indicate the quantity of albumen.

4. The most recently proposed, and one of the best of all the new tests for albumen is sodium tungstate. It was brought to notice about a year ago (London Lancet, Feb. 3,

1883) by Dr. G. Oliver. The salt is freely soluble in water. The reagent consists of water, ten parts, sodium tungstate, two parts, citric acid, five parts.

The reagent is equal in sensitiveness to any yet proposed, and does not precipitate alkaloids, although it does precipitate peptones.* An excess of the reagent, in an acid solution prevents the precipitation—a fact to be borne in mind in using the test. On the whole, it is perhaps to be preferred to any other single reagent for the detection of albumin, and if the solution be heated to boiling, its indications are conclusive.

It is essential, in employing the tungstate of sodium reagent, to insure that the solution employed be strongly acid. If an alkaline solution be employed, and any trace of alkaloid (quinine) be present in the urine, a precipitate is formed which is not always redissolved by the addition of excess of acid, even with the aid of heat. Free phosphoric acid in combination with the tungstate of sodium also throws down alkaloids, and the precipitate is little affected by heat. Some other acids may act in a similar manner, but I have not observed any such instance.

5. Metaphosphoric acid (common glacial phosphoric acid) forms a convenient and portable test for albumin. The sticks may be broken in pieces as large as a pea and carried in a well-corked vial. The acid is very deliquescent, but is not corrosive. Other reagents, however, are more suitable for bedside testing.

The test is made by dropping a fragment of the acid into a test-tube containing a fluid drachm or two of the urine, inverting the tube a few times to dissolve the reagent. On standing, the albumin separates as a coagulum, permitting a rough estimate to be formed of its quantity. This reagent gives no precipitates with alkaloids, and the precipitate of para-peptones produced by it is redissolved by heat, so that the test, which is quite a sensitive one, is one whose indications are fairly reliable.

6. Trichloroacetic acid has also been recommended as a precipitant for albumin, and the reagent possesses certain advantages which entitle it to consideration: It forms crystals which are not deliquescent, so that it can be conveniently carried in the pocket medicine case. It is used in the same way as the meta-

* Dr. Millard states that this reagent precipitates peptones only slightly, and para-peptones not at all.—Med. Record, May, 1884.

phosphoric acid, and is about equally sensitive as a reagent for albumin. It, however, precipitates parapeptones, and these cannot be discriminated by it with certainty from albumin.

7. Dr. Millard (*Medical Record*, May 31, 1884) recommends for the certain detection of albumin, a modification of Dr. Tidy's phenic acid test. Dr. Tidy's reagent consisted of equal parts of phenic acid (carbolic acid) of 95 per cent., and glacial acetic acid. This mixture, however, produces turbidity even in distilled water. If the proportion of acetic acid is considerably increased, the reagent is more satisfactory, while the further addition of liquor potassæ leaves nothing to be desired.

The proportions employed in the modified test are as follows:

- B Acid phenic, glacial, 95 per cent, 3 ii.
Acid acetic, pur., 3 vii.

Mix, and add:

Liquor potassæ, 3 ii 3 vi.

"It is important," the writer states, "that the glacial carbolic acid should be used, or the mixture, which should be quite clear, will be turbid." What is meant by "glacial" phenic acid, we are left to conjecture, and the strength of the acetic acid is not indicated, unless by pure we are to understand glacial. It seems to me probable that it is the acetic acid, and not the phenic, which must be "glacial." Of course, it is the liquified crystals of carbolic acid that must be used. The reagent is said to be as sensitive as Tanret's, perhaps more so. It produces precipitates with strong solutions of quinine and other alkaloids, but these would hardly be likely ever to be present in the urine in sufficient quantity to give an indication with this test. Heat in all cases dissipates the precipitate, as it does also that produced by parapeptones. The behavior of the reagent is, therefore, nearly identical with that of the potassio-mercuric iodide.

Of the tests that have been mentioned, four, viz: picric acid, potassium ferrocyanide, sodium tungstate and potassio-mercuric iodide may be readily put in the form of test papers. In these we may combine the citric acid with the albumin precipitant, except in the case of the mercuric papers, or we may, preferably, employ separate papers charged respectively with the reagent and with citric acid. The general method of applying the test, by means of the papers, is to place in a test tube 30 minims of the urine and introduce a citric acid paper. Observe whether this produces

a cloud of uric acid, or acid urates, or of mucin or oleo-resins. If the urine remains clear, drop in now one of the test papers, and watch the effect. In case albumin is present a cloud begins to form as the reagent dissolves. Finally, in case such a cloud has formed, apply heat, which will re-dissolve any precipitates of urates or alkaloidal compounds, but will have no effect on the albuminous cloud, unless to cause distinct coagulation. If the urine becomes clouded on adding the citric acid paper, it may be warmed previous to the addition of the reagent paper. If heat fails to clear up the cloud, it indicates the presence of mucin. A turbidity only partially dissipated by heat may also be occasioned by the presence of oleo-resinous substances, as after the administration of copaiba, etc.

Peptone is distinguished, in the rare cases in which it occurs, by the fact that heat, nitric acid, and potassium ferrocyanide fail to precipitate it, while the precipitate produced by most of the other tests dissolves when the solution containing it is heated moderately, re-appearing again as the solution cools. The copper test, as proposed by Dr. Ralfe (*British Medical Journal*, 1883), may be resorted to in confirmation of the character of the precipitate. The urine to be tested is allowed to over-lie Fehling's solution, when if peptone is present, a rose or pink tinted zone is developed between the fluids.

Dr. Oliver says, in regard to the choice between these new tests: "It is very difficult to form an opinion when all do their work with much the same efficiency. The picric acid paper should be eliminated as the weakest member of the series. The rest are, clinically, nearly of equal value, but of the three I would, on the whole, decide in favor of the potassium mercuric iodide and the ferrocyanic papers. The latter, by just over-stepping the albumin detecting power of nitric acid and boiling, possesses the great advantage in ordinary work of merely compassing one's accustomed area of clinical experience in albuminuria; and the former, although a useful every day test, may prove now and then specially beneficial in the study of particular cases. The ferrocyanic paper, too, is of all these reagents the least liable to fallacies, for on applying it, one has only to be on one's guard against the precipitation of urates." (*Bed-side Urine Testing*, p. 43.)

The introduction of these new reagents has confirmed an observation, made long ago, that urine, even in health, frequently contains

either albumin or a nitrogenous compound closely allied to it.

The majority of observers, indeed, until recently, agreed that the occurrence in the urine of albumin in any proportion is evidence of disease. "In 1883, however," to quote from Dr. Millard, "experiments on a large scale were instituted by Drs. Chateaubourg and Capitan, independent of each other, and under the most favorable auspices. The subjects were young soldiers, fulfilling all requirements of health, and free, as far as could be known, from unfavorable antecedents, and young school children in perfect health. The reagents and the amounts of albumin found are given, and the conditions under which the albumin was found stated; as after rest, long marches and manœuvres, fasting, cold bathing, unusually hard study, etc. Capitan showed that albumin could be produced in the urine by irritating certain portions of the brain and spinal cord, by exciting the nerves, by irritation of the abdominal plexus, by cutaneous excitation, etc." The results, however, of the examination of persons in perfect health are what especially interests us. "Albumin was found in a large proportion of cases, but in quantities extremely small. In the urine of soldiers after two day's rest, albumin was absent in 55 per cent. of the cases examined. In 20 per cent. the quantity was below 7 parts in 1,000,000, in 2 per cent. it amounted to 15 parts; in the remaining 23 per cent. the quantity was greater (but maximum not stated).

"In the urine of soldiers examined immediately after walking, albumin was found in 76 per cent. of the cases. In 8 per cent. the quantity was below 5 parts in 1,000,000, in 27 per cent. 20 to 30 parts in 1,000,000, while in 18 per cent. the quantity amounted to 120 parts in a million, about one grain to the pint.

"After severe exercise, albumen was found in 85 per cent. of the cases examined, in $4\frac{1}{2}$ per cent. of the cases being easily detected by the ordinary reagents. The smallest quantity was 5 parts in 1,000,000.

"The largest proportion found in any of these experiments was 250 parts in 1,000,000, about one part in 4,000 or 1-40 of one per cent."

It thus appears that the quantity of albumin found in persons in health is extremely small, and that the physician may still rest convinced that the detection of albumin by the ordinary tests—or by any test, when the quantity exceeds 1-30 or 1-40 of one per cent. is almost certainly of pathological import.

It will sometimes happen that disease confined to a circumscribed area of one of the kidneys may render the urine highly albuminous, so that the quantity of albumin is not necessarily an index of the gravity of the patient's condition. After making all these admissions, however, we must insist that in the majority of cases the physician will be safe in drawing from the results of his analytical experiments the usual deductions, as bearing on prognosis and treatment.

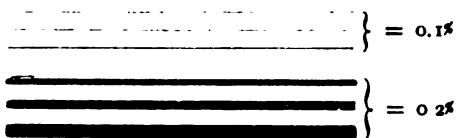
Some physicians have set themselves in violent opposition to the newer tests for albumin, claiming that they are liable to lead to erroneous conclusions, or else they admit the value and even superiority of the tests; but they express the fear that between so many different tests, the physician will become completely confused. The first objection is not well taken. In fact, the new tests enable us to learn more accurately the condition of the patient than would be possible were we confined to one or two only of the old tests. The second objection has no greater force. The physician, if too indolent, or too slow of comprehension as regards chemical facts, will select for himself two or three of the most reliable and most convenient tests with which to make himself practically familiar. While heat and nitric acid will continue to be the reliance of many, a large number will recognize the convenience of the more portable tests, and particularly of the test papers, and will adopt them almost to the exclusion of the old "stand bys." For my own part, if I were to select a single reagent, it would be the potassium mercuric iodide, supplemented, of course, by heat, but I should often desire such confirmatory information as could be obtained from the sodium tungstate and the potassium ferrocyanide. All of these are furnished in the compact reagent case supplied by Parke, Davis & Co., and for the physician in active practice nothing can be more convenient or useful than this vest pocket laboratory.

As regards the comparative sensitiveness of the newer and the older tests, Dr. Oliver states that "as a result of many observations, I find that one part of albumen may be discovered in 20,000 of urine by the iodo-mercuric, picric and tungstic tests; one in 10,000 to 12,000 by the ferrocyanide of potassium and brine tests; one in 6,000 to 7,000 by the heat and nitric acid tests." Prof. Tyson confirms this statement, claiming, however, that the combined heat and nitric acid test, as described in his work on the examination

of the urine, is not inferior to the brine test, which, after all, he admits to be more convenient and preferable for general use. In his experience, also, the sodium tungstate test is somewhat inferior in delicacy to the mercuric or the picric acid test, but Dr. Purdy found picric acid somewhat inferior to sodium tungstate, which held its own with the mercuric test. These comparisons probably were all made with blood albumen or serum albumen. The experiments of Dr. Purdy show that there is a greater difference than has been heretofore supposed between egg albumen and serum albumen, in their behavior towards reagents. While for the former he found heat and nitric acid to be the most delicate of all the tests he tried, for the latter the mercuric and tungstate tests were considerably more sensitive.

The potassio mercuric iodide may be conveniently employed after the method described by Dr. Oliver (*Practitioner*, Feb. 9, 1884) for the quantitative estimation of albumin in the urine. His method may be briefly described as follows:

Twenty minims of the urine are placed in a small test-tube, of 1 cm. diameter. One of the citric acid test-papers, followed by one of the mercuric papers, is introduced into it, and the tube shaken during one minute so that the whole of the albumin may be precipitated. The opacity produced in the fluid is directly proportioned to the quantity of albumin present, and this opacity is determined by means of printed test lines like the following:



The fine test lines are just discernible when the urine contains one per cent. of albumin. The dark lines are rendered indistinct if there is more than 2-10 per cent. present. If the fine lines cannot be distinguished, add water, little by little, until the fluid becomes sufficiently transparent just to permit the fine lines to be seen through the centre of the tube. If it require five times the original volume of the urine to reduce the opacity to this extent, the urine contains $5 \times 1-10$ per cent., i. e., one-half of one per cent. of albumin. If the proportion of albumin is greater than this, it is best to dilute a portion of the urine two, four or eight times with water before making the experiment, multiplying the result obtained

by the factor representing the degree of dilution of the urine.

Another convenient approximate method of estimating the quantity of albumin, is to precipitate it with picric acid, or with ferrocyanide of potassium in a long graduated tube, and at the end of 24 hours, read off the volume of the precipitate. This method is of value especially in watching from day to day the progress of a case of Bright's disease.

On the Use and Abuse of the Pessary.

BY WALTER P. MANTON, M. D., DETROIT.*

A PAMPHLET has recently appeared in London from the pen of a distinguished ovariologist and gynecologist under the above title; and while I have not as yet seen the article, I propose to run the risk of repeating something which Dr. Bantock may have said, and offer a few observations on the same subject.

This is, I am aware, a much-mooted question, one with which our medical press is frequently burdened, and which has, no doubt, before now claimed the attention of the Academy.

Therefore, in presenting this subject, I at once admit that I have nothing new to offer, and my intention is simply to bring to your notice certain points which are frequently overlooked.

In my own mind, I was long ago convinced that the usefulness of the pessary will always be disputed, and it seems to me that the reason must be evident to anyone who will give it a moment's thought. My own experience leads me to say that almost more harm than good is done by the use of this instrument; but I do not for this reason condemn it, for I believe that the secret of the trouble lies in the inexperience of the practitioner.

And just here I would take exception to the statement made by Dr. Macnaughton Jones, in the preface of his work on the diseases of women, when he says that "with the exception of ophthalmology and otology, there is, or ought to be in the hands of most well-trained and well-educated physicians and surgeons, no necessity for the abandonment of the rightful responsibility which, as physicians or surgeons, they should assume to their patients."

This, it seems to me, is a very unfair statement in regard to all the specialties. In the matter of pessaries alone, as Dr. Thomas says,

* Read before the Detroit Academy of Medicine.

"it requires skill and ingenuity, the result of practice, not only to do good with pessaries, but to apply them without doing absolute harm. In the hands of the physician who has made no special, or at least careful, study of their use, and who habitually applies only a half dozen in the course of every year, pessaries are elements of absolute danger. It would be as unreasonable to expect an untaught experimenter to fit the foot comfortably with a shoe, as to hope for efficiency, comfort and safety, from a pessary applied by ignorant hands."

If every student could have opportunities for special training, then, no doubt, being "well-trained and well-educated" men, they would be quite competent to undertake anything. But, I would like to ask, how many new graduates know from practical experiment how to fit a pessary? My own observations lead me to think very few.

Only recently a rising gynaecologist in London, Eng., a gentleman of considerable experience, and surgeon to a woman's hospital in that city, said to me, "We can get no training in such matters. The professors have no time in their clinics, and are too engaged in their private practice to give such instruction." A graduate of one of the New York schools, where the most distinguished of American gynaecologists holds his weekly lectures, told me not long ago that during their whole course of gynec study, they had not an opportunity to examine a single patient.

Such men—very competent, no doubt, in a general way—are expected to attend to the diseases peculiar to women, along with their general practice, and to fit pessaries.

If blunders are made, if they become disgusted after repeated trials, and perhaps frightened at the mischief they have done, is it a wonder that they give their voice against the use of the pessary? Such things are done altogether too much according to the books; you can however, no more fit a pessary by book-rule than you can measure out fodder for your horse by putting an arithmetic into the oat-bin.

The matter of adjusting a pessary is a nice one, which, although at the first glance it may appear easy enough, really requires much experience, careful measurements, and delicacy of touch. In most cases it will not do to shove in a ring or air bag, and leave the patient to go on her way. Pessary fitting is as much a matter of conscience as anything I know of; for why should we ruthlessly

cause suffering, when it is the purpose of our art to relieve it?

"The real physician," says Broussais, "is the one who cures." When a case comes to us we must first determine whether a pessary is necessary, for we often find cases where a dorsal or lateral recumbent position for a few weeks with young unmarried patients, or after reposition of the displaced uterus, a small tampon of cotton-wool placed behind or in front of the cervix for a few days, is all that is required, and anything less would be neglectful, anything more harmful.

Having decided that a pessary is necessary, we must ask ourselves, is it admissible, that is, are all the conditions of the vagina and uterus such that an instrument can be tolerated by the patient without doing more harm than good? It would be obviously wrong to place a pessary where there is inflammation or inflammatory exudate present, upon which the instrument would press and cause the patient great suffering, besides keeping up, if not increasing, the inflammation. It would, of course, be useless to put in a support if the uterus was still dislocated, or bound down by adhesions, without having first reduced these conditions. We would not place a pessary if there were erosions on the vagina, or a vaginitis present; or if a prolapsed ovary bound down by adhesions, could not be raised.

In short we must seek to exclude all conditions where the pessary, although it might do some good, would also do absolute harm. It is generally impossible to get a pessary to stay in place where there is a laceration of the perineal body, and we must proceed to surgical restoration of the latter, before we can hope to relieve the condition for which a support is necessary. We now and then meet with a case where the vagina, especially the posterior wall, is so short that no pessary which we can fit, will remain in place. This condition may often be remedied, but it is a long and tedious affair, both for surgeon and patient. Sometimes, however, if persisted in the results are brilliant. The treatment consists in packing the posterior fornix vaginæ firmly with small tampons of cotton that have been previously soaked in equal parts of glycerine and water, and squeezed dry between the hands. This can be done only with the patient in Sims' position, and the parts exposed by the duck-bill speculum. The object is, of course, by frequent packing, twice or three times a week, to push the vaginal wall upward along its cervical attach-

ment, and thus, by repeated stretchings, to permanently increase its length.

The packing itself often gives great relief, by slightly raising the uterus and preventing traction on its ligaments. Having determined the conditions favorable, we must next decide on the variety of pessary called for. This is often a matter of no little moment. It is the habit, I find, with many practitioners, to employ only the elastic ring pessary. In some instances this is useful, but I believe its uses are restricted, and as Thomas says, in posterior and anterior displacements, for which it is most frequently used, it is "only palliative and imperfect in mechanism." A ring pessary, if too large, will distend the vagina, and produce erosions, both decided mischiefs. If too small it is, of course, of no use.

The pessary which I have found most generally useful is Albert Smith's modification of the Hodge. This, properly adjusted, will meet the majority of cases, for the relief of which a pessary is necessary. In cases where there is a prolapse of an ovary into the posterior cul de sac, where the former can be shoved up out of the way, a Thomas bulb pessary, which is an Albert Smith's, with a thickened upper end, will keep the ovary from being pressed upon, and serve its primary purpose as well.

For anterior displacements I prefer the Thomas or Grailey Hewitt pessary. For the condition of shortened vagina, already alluded to, a Fowler's pessary is often adequate to accomplish our ends, without having to resort to the stretching process.

Other pessaries have their occasional uses, but the few varieties mentioned give the most general satisfaction. With the use of intra-uterine stem pessaries I have had little experience. I have seldom found it necessary to use them, and, with hardly an exception, consider them a dangerous instrument.

When we have decided upon the kind of pessary we need, we must select one that will fit; for, in my opinion, it is as necessary that a pessary should fit the vagina as that a glove should fit the hand, or a shoe the foot, for an ill-fitting instrument may do great injury without the patient's knowing it.

For the purpose of determining the width of the vagina, and, therefore, of the instrument required, a simple and ingenious vaginometer has been devised by my friend, Dr. Wm. H. Baker, of Boston. This consists, as you see, of two blades which cross, and each of which is tipped with a button. It has a scissors

handle, and a small index and pointer, on which the number of inches to which the vaginometer is opened may be read off. By inserting this into the vagina and opening the blades, one can determine to a degree the width of the pessary necessary.

The length of the vagina may be measured by passing the handle of a cotton stick up to the posterior fornix; then, by placing the finger on the rod just within the vaginal opening, about on a level with the urethral swelling, we have the length required. This may be determined in inches by measuring the distance from the end of the cotton stick to the tip of the finger. This is a much simpler method than any of the various *instruments* devised for the purpose afford.

If we have a pessary at hand which corresponds to these measurements, we may place it at once. If it nearly agrees, but not quite, we may give it the necessary curves, etc., by rubbing it with lard and warming it in the gas or spirit lamp flame, assuming, of course, that the instrument is of hard rubber. Often, however, we have not the right shaped support at hand, or for some other reason do not wish to place a permanent instrument until we know how it will work. We may then use a block tin pessary. As these rings come of different sizes, and are quite malleable, we are enabled to give our temporary support just such curves as we find desirable, and to change it at a moment's notice should it be necessary.

One point which I may note here, is the necessity of seeing that the lower portion of the pessary does not press upon the urethra, and cause, as is frequently the case, great discomfort and irritation, or even urinary retention. A little dent or urethral curve must be made in the lower portion of the instrument just over the canal.

I have always found it advisable after adjusting a pessary to let the patient walk about a little, and to wait a few minutes before taking her departure, in order to ascertain if the instrument causes any pain or discomfort.

The question is often asked, how long should a pessary remain in the vagina without being looked after? It is always safe to have patient return in from three days to a week, to let the physician see if the pessary is acting well. After that, once in two months is generally sufficiently, often, for its removal and cleansing. In the interval the patient should keep the vagina clean by means of the hot douche. This not only acts as a cleanser,

but its tonic action on the tissues helps to accomplish the end sought for. I also am in the habit of instructing the patient how to remove the pessary, should this be necessary at any time from symptoms of irritation arising.

Pessaries should not be worn year in and year out without change; or left to remain after they have served their end. Splints, on a broken limb, are very useful, but when the bone is once united, the splints, if left to remain, do damage rather than good. So with the pessary, when the uterus can do without the props which in weak and distorted condition were necessary. It is frequently the case that after a few months we are enabled to reduce the size of the pessary first introduced, or to remove it altogether.

Should erosions appear at any time on the vagina while the mechanical treatment is being carried out, the pessary should be removed at once and not replaced until all the erosions have been healed under proper treatment. To recapitulate:

1. We should determine the necessity for the pessary.
2. The conditions of the uterus and vagina should be such as to permit its use.
3. The pessary should fit, and the vaginal measurements be exactly and carefully taken.
4. We should be sure the pessary does all it should, and no more, before allowing the patient to depart.
5. We should examine the patient not later than a week after introduction of the pessary, and at least every two months afterwards.
6. The patient should be instructed how to remove the instrument if it hurts her, or there are symptoms of irritation or inflammation. And finally,
7. The pessary should be removed as soon as it has done its work.

If these few points, which I have attempted to present, be carefully observed, there can be no such thing as abuse of the pessary, and its use cannot be otherwise than obvious to all.

80 FARRAR STREET, December, 1883.

Responsibility as Affected by Alcoholic Anæsthesia—Mental Alertness Restrained and Confined—Fixation of Ideas.*

BY T. L. WRIGHT, M. D., BELLEFONTAINE, O.

IT IS a principle in natural philosophy that a body projected into a space will, con-

sidered abstractly, progress with an equable velocity, and in an undeviating line of direction, forever. But in consequence of the operation of modifying forces, temporary and local, this great law of nature is hindered; and the missile, through the resistance offered by gravitation and the atmosphere, instead of a straight and steady flight into the remote places of the universe, describes an increasing curve, and speedily falls back to the earth.

In a manner precisely analogous, an idea projected into the mind has, abstractly, a tendency to remain fixed. No matter whence its source, whether of perception or of suggestion, or of the organic processes within the body itself, its disposition is to remain unchanged in its movements and possibilities as long as the mind endures.

But through the intervention of certain active agencies an idea soon loses its ascendancy in the mind, and is thrust beyond the range of attention. The modifying influences in this case are numerous. Yet a few of them are peculiarly distinct and prominent. Amongst these the property of sensation is of great force. Through sensation new perceptions originate, supplanting the old. The intrusions of memory, variously effected, also suggest new ideas and inaugurate new trains of thought. The end is, in the sound mind, that ideas continually give way under the pressure of renewed perceptions, associations, and reminiscences; and being thus violently displaced, they fall at last below the mental horizon.

With reference to matter and the laws governing its conditions, I have nothing more to say; but respecting the fate of ideas in the minds of men, when they come under some peculiar relations, I will offer a few facts and considerations.

It is no doubt true that the ordinary tactile sensibility, called the "sense of feeling," is more especially implicated than either of the other senses when anæsthesia from alcoholic indulgence is present. The senses of sight and hearing, and even taste and smell, are considerably impressed. But the tactile insensibility is more obvious than the same defect in the other senses. So great, indeed, is the anæsthesia affecting the sense of feeling when it is derived from alcohol, that severe injuries are often unnoticed, because they are not felt. The sensibilities become so benumbed that accurate sensations and clear perceptions are impossible. The consequence is, that the ideas which happen to be upper-

* The following is one of the chapters on Alcoholic Responsibility, taken from an unpublished MSS. that treats of "Intoxication, a Pathological and Physiological Study."

most in the mind have a tendency to remain unchanged and continuous. A great nervous function—sensation—through the operation of which ideas might be modified or superseded, is lost, inactive. Ideas, in the same proportion that anæsthesia pervades the nervous energies, are beyond the control of the judgment or of choice, and they can be supplanted only with the greatest difficulty.

When it is considered that common sensation fills a place really more extensive than that occupied by its own special duties, that it is the chief arbiter in questions respecting the accuracy of the other senses, it becomes clear how widespread is the harm which must flow from a serious interference with its powers. Illusions, hallucinations and delusions without number, would beset the soundest mind, were it not that the sense of feeling is ever ready to confirm or deny the correctness of the information derived from the eye or the ear, or from the senses of smell or taste.

Under many circumstances in life, the state of a mind wherein the ideas are fixed, or with difficulty are changed, becomes of the greatest moment with reference to a determination of the quality of conduct, and of the degree of responsibility which of right should attach to it.

In the earlier periods of a drinking bout, thoughts may seem to flow readily, and with many pleasing changes. But very shortly, if the drinking is heavy, the state of anæsthesia supervenes. In this stage of inebriation the fixedness of the ideas may be readily perceived in the actions of the individual. He is pertinacious in demanding audience. For hours together he will reiterate some imbecile incongruity of mental association, to all who will listen, mistaking it for wit. He will search for a particular thing or person with unflagging assiduity, during periods of time greatly in excess of the requirements of good sense or sober judgment. The leading idea in the mind is not readily changed or abandoned, because the facilities for the introduction of new conceptions are confined and injured by reason of the prevailing difficulty of producing perceptions for rational contemplation.

Up to this time there is little or no harm flowing from the fixation of idea. The train of thought is usually pleasing; the feelings are agreeable; and the disposition is generous and liberal. Assuming these statements to be true, their importance is enhanced in view of what next takes place.

It is known that in a subsequent stage of intoxication the brain becomes poisoned and distressed, through the accumulation in the circulation of carbonic acid, urea, and other noxious substances. The disposition is then wholly changed. Ideas are no longer agreeable or frivolous; and the feelings cease to be generous and playful. Yet the tactile anæsthesia remains, and the dominant ideas are still fixed and sluggish, and they are not readily abandoned or modified. The cephalic pain now engenders a sullen disposition; and hate, rage and revenge color the leading thoughts and feelings. It has been said that "rage is a brief insanity." It is also a very dangerous insanity. There are few people who have not rejoiced that rage is short, and that strong emotions soon pass away. There are few who do not feel that were it otherwise, they would most likely be called upon to lament some deed of violence that rage and fury had tempted them to perpetrate. The law recognizes the insanity of rage when it materially reduces the responsibility for acts committed in a sudden passion.

But the mind driven to fury while under the influence of alcohol, occupies a very peculiar position. It is possessed with madness, indeed, but not brief in duration. It is a madness that, from the nature of anæsthesia and of alcohol, the mind is powerless to arrange or overcome with ordinary facility, or in a reasonable time.

In illustration, I will relate the following: One H—, a young man of my acquaintance, shot and killed a person with whom he had been quarrelling. Both parties had been drinking heavily for a number of hours. Had H— perpetrated the crime in the midst of dispute, the law would have exonerated him, in a considerable measure, from responsibility. But it so happened that there was a lull in the quarrel before the final catastrophe. The actors had become separated. H— went out and walked around two or three squares, during which time a companion placed in his hands a revolver. Soon thereafter he returned to the presence of his enemy, and shot him down, firing twice. There was no new controversy indulged in; and the man who was fatally hurt seemed desirous to get away.

H— was indicted for murder in the first degree. In consideration of the time consumed by him in walking the streets, and away from his antagonist, it is the opinion of many that he was guilty of premeditated murder.

If it is true that the law is right, in that it would hold H—— guilty of manslaughter only, if he had killed his opponent at the moment when he first left him, then it is also true that the law is wrong and unjust in holding him guilty of a greater offence for committing the crime immediately upon his return to the scene of the original trouble. The reason for the conclusion is, he came back in precisely the same state of mind as that in which he departed.

Let us examine a little more particularly the elements of this case. When H—— went out upon the street, and away from his opponent, he was, without doubt, under the influence of alcoholic anæsthesia. His motives, thoughts, and ideas were, to a considerable degree, fixed and established, and without the possession of any natural and rational power of modification or change. Besides this toxic disability, the entire functions of the venous system were under the predominant control of alcohol. Every expression of the countenance was alcoholic. The movements of the eyelids, the crooking of the finger, the changing positions of the limbs were all alcoholic; and by no exertion of the will or of automatism could these motor functions be brought into a semblance of a normal and reasonable appearance. They were all *alcoholic*.

In a parallel way alcohol assumed, with irresistible power, the control of reason and morality. Reasoning, motives, judgments, and mental decisions were alcoholic; and by no process of the intellectual powers could they be brought into a natural exhibition of the normal and healthy state. Every nervous function, motor, rational, moral, and volitional, was inexorably alcoholic.

The time that elapsed between the separation of the two men, and the return of H——, could not have exceeded half an hour. It was probably about twenty minutes. When H—— returned, his anæsthesia still prevailed. His ideas and intentions were most likely still fixed and unaltered; alcohol was still surging and raging through the capillaries of his brain; compelling all his powers, mental and moral, to bow to its supremacy.

Is it not preposterous to claim that, under such circumstances, a mind may "cool down," and its responsibility become radically changed in a few minutes?

The exigency of expediency, may possibly excuse the law as it is applied to the responsibility belonging to the drunken state; but equity never will.

If common anger is a brief insanity invoking the merciful consideration of the law, I cannot perceive any just reason why the settled fury attending the advanced stage of drunkenness, should not be entitled to a similar consideration. In the latter case, the will is innocent of the inception of the madness; and the mind is also incapable, in consequence of the toxic condition of the body, of righting the wrong state of motive and disposition. In the heat of passion, it is claimed justly, that there is no opportunity for reflection, and the calm and rational consideration of consequences. In a state of mind when passion is morbidly continuous, there is also no available point where cool reflection can be introduced, or the consequences of conduct calmly canvassed. In true insanity from undoubted brain diseases, a long and fixed hatred or rage, is esteemed to be good reason for an abatement of responsibility, or an entire release from it. The belief is reasonable that functional incapacity of the brain, as from alcoholic anæsthesia, may present the same symptoms and disabilities, as structural lesions; and, as long as it remains, it should receive similar privileges and exemptions.

Preparation in Michigan Against Cholera.— Statement of the Status of the Public Health Work in Michigan.*

BY HENRY B. BAKER, M. D., SEC'Y OF THE STATE
BOARD OF HEALTH.

IN Michigan, as elsewhere, public-health work rests largely on the local authorities, to whom belongs the authority and the responsibility for whatever may need to be done in any given locality. As there are a great many local health officers in Michigan (in the jurisdiction of any one of whom cholera might occur), it is impossible to say beforehand what would be done in a locality in the emergency of an outbreak of cholera. This may be said, that as the State Board of Health has during more than ten years been urging the better organization of local boards, and better work by them and by the people, who are required to report to them diseases which endanger the public health, and as the State Board has thereby secured on the part of local boards a completeness of organization and an efficiency of work far in advance of what had been attained in the State before, there seems to be laid a good foundation of preparation

* Read at Conference of State Boards of Health, and Health Officers and Quarantine Officers of the principal cities and ports in the United States and Canada, at Washington, D. C., December 10, 1884.

for any outbreak of cholera which may occur. There is now an organized board of health in every city, village and township in the State, and nearly all of them (1,158 out of 1,391 for the year 1884-5), have complied with the law which requires every local board of health annually to appoint (or reappoint) a health officer and to report to the State Board of Health his name and address, and promptly to fill any vacancy which may occur. The State Board has published and distributed to all the local boards a pamphlet containing the addresses of all the health officers in the State; and thus local boards have a ready means of communicating with each other in time of danger.

The discipline of local boards of health in Michigan has been greatly promoted by the work of the State Board in connection with the constant presence, in different parts of the State, of scarlet fever and diphtheria, and the occasional presence of small-pox, in dealing with which local boards have, under the direction of the State Board, obtained much practical information as to the nature of communicable diseases, their modes of communication, and the best means for suppressing them.

Local boards of health have learned by experience that communicable diseases may be controlled, and that by prompt action on the first appearance of such a disease they may avert what otherwise would be a widespread calamity. Scarlet fever, diphtheria, and small-pox are different from cholera; but men, educated to their responsibility as health officials, and trained to deal with these diseases promptly and intelligently, are thereby in a much better condition to learn the ways of cholera and to deal with it successfully.

The wide distribution, by the State Board of Health and by local boards, of popular documents on the restriction and prevention of the diseases just named, and on the duties of local boards, physicians, householders, and the people generally, with reference to these diseases, has done much to educate both health officials and their masters, the people, as to what they may and should do to avoid or suppress communicable diseases.

As a class, the physicians of Michigan recognize the importance of the work done by intelligent boards of health, and co-operate therein. Health officers have not, as a rule, trespassed on the domain of the family physician, and the physicians have learned to respect the officer who, on the outbreak of a dangerous communicable disease, appears as

the representative of the interest of the people; and by hearty co-operation with the health officers they have not only strengthened their own influence, but have built themselves into the public-health service of the State, in a way that demands on the part of the people and of the State Board of Health courteous acknowledgement. The law which requires that, where practicable, the local board of health shall appoint a well-educated physician as health officer, and the more recent law which provides compensation to the physician for his trouble in giving the health officer prompt notice of a case of a communicable disease, dangerous to the public health, have helped to bring about this good will between physicians and local boards of health, — a most desirable condition in time of great danger.

The fact that the Michigan Board of Health has for some time been trying to educate local boards and the people as to what they may well do for the prevention and restriction of typhoid fever, by cleanliness of towns, and by protection of the water-supply from all sources, and that it has recently enlarged its work in this direction, has done something to prepare the way for the needed instruction with regard to cholera.

Taking advantage of the popular interest in the subject, the Michigan Board distributed last summer to local boards of health and others a large edition (20,000 copies) of a document calling attention to the real sources of danger from cholera, and to proper means for preventing and restricting it; and this distribution was supplemented by the preparation of a special circular on the subject, which was issued by the Commissioner of Railroads to all railroad officials, agents, and employes in the State. At least one city in the State has reprinted and distributed to its own people our general cholera document, as a means of educating the people to the duty of the hour.

I hope I have not overdrawn my statement of the preparation in Michigan for the coming of cholera, and of the efficiency of the health service of the State. There is yet much ignorance of what should be done, and of what has been done to prevent sickness. There is much apathy among the people, inefficiency and indiscretion on the part of officers; but there has been improvement in the direction which all public-health work must take to be lasting and complete, namely, in the education and instruction of the people; and it is believed that in most intelligent

communities in Michigan there is an educated sentiment with regard to dangerous communicable diseases, which sentiment is capable on demand of doing much towards controlling cholera should it appear. The increased and increasing facilities of communication between local boards and the State Board improve the situation. The success already attained encourages us to look to the further training of local boards, and the more general education of the people for the accomplishment of one great end in view, namely, ridding the State of dangerous communicable diseases.

Except in certain cities and villages, where special charter provisions may conflict with the general law in Michigan, local boards of health audit their own expenses, including the salaries of the health officers; and yet in an emergency requiring prompt and unusual expenditures, they are likely to be crippled for want of the "sinews of service," because of there being no money in the treasuries upon which their orders must be drawn. In some localities there might be danger that, because the burden was a local one, an unfortunate economical policy might prevail; and while great epidemics of cholera do not usually occur where there is not also a large population to bear the expense of controlling them, yet the correct principle would seem to be that dangers which threaten many should not be left for the few to battle with unaided. When, in 1879, Congress appropriated \$500,000 as a contingent epidemic fund, to be used at the discretion of the President, if necessary to prevent the introduction or spread of contagious diseases, I believe it established a precedent which might well be followed by state legislatures. The expenses attending the stamping out of a local outbreak of an epidemic disease which threatens the state or the nation may well be provided for by the state or nation; and if such provision has not been made by the state or national legislatures, the people will know where to charge the blame in case unaided local authorities shall be found incapable of successfully battling with such an outbreak.

We do not make cholera or small-pox in Michigan; we have not yet learned how. And if we could be protected against the introduction of dangerous communicable diseases from other countries and other states, or if we were allowed to protect ourselves by such a tax on suspected travelers as would pay the expenses of an adequate inspection service, we would ask little or nothing of the general

government. But situated as we are on the great highways of immigration to the whole northwest, and having a port (Port Huron) second only to New York in number of immigrants received, we justly feel that the power which claims the exclusive right to tax the immigrant should bear the expense of the needed inspection, which would be not for the benefit of Michigan alone or chiefly, but for the benefit of a large portion of our country.

RESOLUTION OFFERED BY DR. HENRY B. BAKER, OF MICHIGAN.

Resolved, That a prudent regard for the probable danger of the introduction of cholera at localities where the local authorities are unable to battle with it successfully, suggests the propriety of an appropriation, by each state legislature, of an epidemic contingent fund, to be placed at the disposal of the Governor of the State, to be used under the direction of the State Board of Health, in case of necessity, for preventing the introduction or spread of cholera.

(Referred to the Committee on State Action, etc.)

A Case of Stricture of Rectum Relieved by Colotomy.

BY J. J. REYNOLDS, M.D., DEFIANCE, O.

IN the present condition of surgical science the operation of colotomy is demanded whenever the life of the patient is jeopardized by any irremediable obstruction of the lower bowel. The conditions needful for the operation do not occur with any considerable degree of frequency, hence the operation is comparatively rare, and it is only within the last few years that it has been considered justifiable.

Smith, in his "Operative Surgery" (1852), says: "In the United States the formation of an artificial anus has been attempted, as far as I can learn, without much success." He reports ten cases by different surgeons with eight deaths and two recoveries. He adds that he considers the operation, in view of the unfavorable statistics, hardly a justifiable procedure. But since that time surgeons have been more successful, and the operation is viewed in a much more favorable light.

The formation of an artificial anus, at the groin, was first suggested by Littre in the year 1710, and is known as "Littre's operation; but, from what literature on the subject is at my command, it seems not to have been

attempted until 1776—by Pillore. It is performed by making an incision two to three inches in length in the left iliac region, parallel with and a little above Poupart's ligament, and midway between the ant. sup. spine of ilium and spine of pubes, cutting through the various structures down to the intestine, when the gut itself is opened and stitched to the skin.

Other locations have been selected for the operation since that time, viz: the right iliac region, opening into the cœcum (Pillore, 1776); the left lumbar region, opening into the sigmoid flexure or descending colon (Callisen, 1796); the transverse colon in umbilical region (Fine, 1797), and finally right lumbar region, opening into cœcum or ascending colon (Amussat, 1839).

Of these the one which offers the best results is left lumbar colotomy, and is the one which should always be selected when the disease necessitating the operation does not extend above that point.

It was first suggested by Callisen in 1796, but seems to have met with no favor. It was revived, and extended to the ascending colon by Amussat in 1839, and is known as Callisen's or Amussat's operation.

Although Littré's operation is still preferred by a few on account of its greater simplicity, the results are not so good as those following Amussat's operation, from the fact that in the latter the peritoneum is avoided; and it is the only operation of all mentioned in which the abdominal cavity is not opened. From what figures I can find compiled by various statisticians—Mr. Hawkins, Mr. Curling, Bryant, Gross—about 33 per-cent. of cases of left lumbar colotomy are fatal, while with Littré's operation the mortality is about 60 per cent.

W. T., aged 32 years, of good family history, sent for me June 12th, 1884. He said he was suffering with "chronic diarrhœa." On interrogating him, I found that for three or four months his discharges had been of a slimy character, and usually contained a small quantity of blood. They were becoming thinner and thinner, and at that time were nearly as thin as water. He also suffered considerably with pain of a griping character in the abdomen.

On examination, per rectum, I found, high up in the pelvis a growth which, while being mostly in front, surrounded the bowels, infiltrating its walls and almost completely closing its calibre. The condition was gradually and surely progressing to complete obstruction. Feeling that the removal of the growth

would be impracticable on account of its probably involving several inches of intestine; as well as on account of the uncertainty of its nature, I decided that the only means of prolonging the life of my patient was in the chance offered by colotomy, which was performed June 27th. At this time he had had no evacuations of any character, per rectum—not even of flatus—for seven days. A very poor appetite with frequent vomiting, and frequent attacks of severe colicky pain, due to distension with gas, had reduced him to a condition of extreme emaciation.

With the assistance of Dr. W. S. Howell, of this city, I proceeded to perform left lumbar colotomy after the usual manner. An oblique incision about four inches in length was made in a direction upward and backward from a point near ant. sup. spine of ilium: the centre of the incision crossing an imaginary line running perpendicularly upward from the crest of the ilium. Very little hemorrhage resulted—but two small arteries being divided. As soon as the different structures were divided the distended colon presented itself. A needle armed with a double thread was then passed through the integument on upper side of incision, thence into the colon, the needle being pushed along therein and made to emerge at a point one and one-half inches below the point of entrance. It was then passed through integument of lower side of incision. A longitudinal incision, an inch in length, was now made in the colon directly over its contained thread, which was then brought up through the opening and divided, thus making two sutures, one on either side of the oblique incision. These were at once tied. Other sutures (8 or 10) were taken—stitching the opening in the intestine to the skin as firmly as possible. The incision through the skin on either side of this artificial anus was then closed by sutures, which completed the operation.

On opening the colon a considerable escape of flatus at once took place, but no discharge of fœces occurred for two or three hours.

On awaking from the anæsthetic, he said he felt very comfortable; and on account of the relief from gaseous distension the nights which followed were full of refreshing sleep. The after-dressings were absorbent cotton soaked in a 1-10 per cent. solution of corrosive sublimate, and dried. Oiled lint sprinkled with iodoform was laid over the cut on either side of artificial anus. The union of bowel with integument was complete in about eight days. The wound on either side, however,

soon gaped; and I removed the stitches and it healed by granulation. The discharges from bowels irritated the skin and produced considerable annoyance. There were never any constitutional disturbances, however, and in a month from date of operation the wound had entirely healed.

He began to improve at once after the operation. Appetite returned, digestion improved, and he gained rapidly in weight and strength. I have withheld this communication hoping that I would be able to report the present condition of the rectum. But in this I have been disappointed, as I have not seen him and can only report (from hearsay) that at this time—four months after the operation—his general condition is very good.

A Case of Inversion of the Uterus.

BY DR. D. C. HOLLEY.*

IN the spring of 1880, I was called to attend Mrs. G——, æt. about 35, multipara, fourth labor. She was of Irish extraction, strong and robust.

Upon taking my seat by the patient, found that the first stage of labor was far advanced, and the vertex already pressing upon the perineum. The labor progressed apparently in a perfectly natural manner; pains active and remarkably strong. In the course of an hour the child was expelled with great force. Just as the head was emerging from the vulva, a powerful uterine throe completely forced away the child from the parts of the mother. Heedlessly and thoughtlessly, not dreaming of any parturient accident, either present or prospective, I gave my attention to the child, contrary to my usual practice. But, alas! here my trouble commenced. The child was healthy and vigorous, and cried lustily upon its advent into the world. I had directed one of the women in attendance to make gentle pressure upon the abdomen of the patient, while I waited a few moments for the new pulmonic circulation of the child to become thoroughly established, manifested by that ruddy hue of its skin we all like to see so well, before tying the cord. When I happened to turn my attention to the patient, to my surprise and consternation, she appeared to be in a complete state of collapse, pulseless and unconscious. Supposing I had a case of sudden postpartum hæmorrhage on my hands, I hastily tied the cord and gave the

child to the nurse, and turned my whole attention, with no little anxiety and alarm, to the mother. It is true, I found considerable flooding present, but not enough to account for the symptoms.

Proceeding at once to pass my fingers into the vagina, I found it filled with a mass which, of course, was the placenta, and it was partly protruding from the vulva. Thinking it probable that the placenta, separated from its connections with the uterus by the last powerful throes of labor was lying loosely in the vagina, and partially blocking it up, it instantly flashed through my mind that my patient was bleeding to death internally. Attempting, as quickly as possible, to remove the obnoxious placenta, to my further surprise I found it adhered to something behind it. Need I tell you that the something was the partially-contracted, globular-shaped, completely inverted uterus, filling up the vagina and crowding the placenta through the vulva? Quickly passing my fingers behind the after-birth, I very easily separated and peeled off the adherent portion, and removed the whole mass of secundines. The round, globular mass of the partially contracted womb now filled the whole vagina, and its open-sinuses were pouring out the crimson flood in no stinted manner. I now very fully understood why my patient was lying in this dead faint (syncope).

No time was to be lost. I could not send for assistance to do me or my patient any good, being three miles out of town, and my patient rapidly slipping through my fingers into the beyond.

Without wasting a moment, I placed the fingers and thumb of my right hand into the shape of a cone, firmly placed them against the inverted fundus, made steady pressure, while my left hand upon the abdomen of the patient above the pubes made counter-pressure, and in a few moments, to my intense joy and satisfaction, the fundus began to yield, and in a moment more my hand was fairly inside the reinstated and restored organ, from which I made no attempt to withdraw it, but sought, by turning my hand partly around once or twice, to provoke the troublesome viscus to contract, which it very shortly did, throwing my hand back into the vagina. Placing a compress wet with whiskey above the pabes, and over this a binder, with a little difficulty we succeeded in getting the patient to swallow 10 grs. carb. of ammonia in a teaspoonful of Squibb's fl. ext. ergot, followed by hot milk punch, repeating the

* Read before the Grand Rapids Academy of Medicine, Dec. 9th, 1884.

volatile alkali and milk every quarter of an hour, hoping thus to bring my patient out of her terrible collapse.

All this passed in much quicker time than it takes me to read it to you. And now, when I had time to stop and think, I sent for counsel, hoping, as a poor sort of comfort, at least, perhaps the doctor might be there in time to be in at the *death*. Dr. Osborne, of Owosso, came. He examined the patient, reviewed the treatment, and expressed himself by saying that everything necessary in the case had been done and was being accomplished by present treatment, and advised to continue medicine. At this time two hours had elapsed since the patient's delivery, her pulse barely perceptible, and she lay in a semi-unconscious condition. Extremities cold, the surface clammy, notwithstanding the free use of bottles of hot water, and the application of flannels wrung out of water as hot as the hands could bear. At the end of twelve hours, however, she had rallied so far as to answer questions rationally, and to express herself as feeling quite comfortable. And though her convalescence was slow, at the end of the lying-in month she had fully recovered. Now for the cause of all this trouble. To my mind, it was very simple; only this, a preternaturally short *funis*, together with powerful uterine contraction just at the end of the second stage of labor, were the two factors in this case, at least, to which I attribute this fearful accident. Upon examination the funis was found to be only a fraction over ten inches in length, and was somewhat entangled in the child's arms. A thoughtful consideration of this case has led me to the belief that if we actually knew about many of the unwritten histories of very many of the cases mentioned in obstetrical literature, we should find the same causes equally operative.

Proceedings of Societies.

Detroit Academy of Medicine.

OCT. 14, 1884.

The Academy met at the office of Dr. Connor, Dr. Long presiding.

WRITTEN COMMUNICATIONS.

Dr. Bradley read a paper on "The Want of Liquor Amnii as a Cause of Club Foot."

DISCUSSION.

Dr. Cleland: The paper is to me a very suggestive one, and offers a very plausible

explanation of this class of deformities. I had not myself thought of such an explanation, but now that my attention is called to it, I think my own experience has furnished cases illustrating the doctor's theory. Dr. Billroth says that anything that will approximate the extremities of the fœtus in utero will tend to cause these deformities. The absence of liquor amnii would tend to produce that result.

Dr. Connor: I have no personal observations to relate bearing on this topic. The explanation offered is, however, a plausible one. Club foot is an error of development, but one which might easily result from a purely mechanical cause, and such a cause may exist in the pressure upon a fœtus not guarded by the usual provision of liquor amnii. In order to decide such a question as this, a number of cases should be collected. If only two or three cases have been observed, it might happen that the association of club foot with deficiency of 'amniotic fluid' was a mere coincidence. Every additional case, however, diminishes the probability of this, and so aids to establish the theory, which in itself seems eminently reasonable.

Dr. Long: If deformities can be produced by pressure after the birth of the child, it would seem probable that they might be caused in a similar manner even more readily in the fœtus in utero. The Chinese produce deformity in the feet of their children, as some Indian tribes do in the heads of their papposes, by mechanical compression.

VERBAL COMMUNICATIONS.

Dr. Connor: Dr. Hartigan, of Washington, D. C., has recently reported forty-nine cases of trismus neonatorum, in which he claims as the cause a displacement of the cranial bones. Thirty years ago Dr. J. Marion Sims advanced the same theory, but I am not aware that it has been generally accepted by the profession.

Dr. Long: Dr. Sims continued to hold to the theory up to the year of his death.

Dr. Cleland: It does not seem to me that there is much foundation for the theory. Infants are seldom left long enough in one position to run any risk of any such displacement taking place post partum, and the difficulty is not ascribed to any violence during parturition. Nature generally provides for all such matters, and it seems to me improbable that this instance forms an exception. In two or three cases which have come under my own observation, I have looked for dis-

placement of the cranial bones, but have failed to discover it.

Dr. Connor: Most of Dr. Hartigan's cases were in colored children, and the same was probably true of the cases observed by Dr. Sims. Perhaps race may have something to do with it, or the children may not have been cared for as tenderly as infants belonging to our own race. The affection must be much more common in Washington than it is in northern cities, if the doctor gives us a truthful record of his own observations.

Adjourned.

OCT. 21, 1884.

The Academy met at the office of Dr. Yemans, the president occupying the chair.

Dr. Connor introduced a patient to illustrate the newly discovered effect of cocaine muriate as a local anæsthetic to the eye. The case was one of optic neuritis, examined for the first time by the doctor this afternoon. The pupil of the right eye was slightly dilated, and reacted only sluggishly to the stimulus of light. The doctor said that an ophthalmoscopic examination of this eye had been made about two o'clock in the afternoon, the pupil being at that time fully dilated under the influence of the cocaine salt. The effect differed from that of atropine and other mydriatics: 1st, in its very brief duration, the eye returning to its normal condition within twelve or fifteen hours; and 2d, in the circumstance that the dilatation of the pupil is not accompanied by paralysis of the accommodation.

Two drops of a two-per-cent. solution were introduced into the eye, and the application repeated after eight minutes. Dilatation of the pupil followed in ten or fifteen minutes, complete anæsthesia of the cornea and conjunctiva being produced at the same time. This latter phenomenon is the recent discovery of a medical student in Vienna, and the doctor gave a practical demonstration of it before the Academy, not only in his patient, but in the person of one of the fellows of the Academy, who volunteered for the experiment.

Dr. Connor further read a paper detailing his experiments with the muriate of cocaine as both a mydriatic and a local anæsthetic in ocular surgery. He had performed several operations on the eye under its influence, the patients declaring they felt no pain whatever. The operations included the removal of a pterygium, slitting up of the canaliculus, and dilatation of lachrymal duct, and the extrac-

tion from the cornea of an embedded fragment of metal. See LANCET, November, 1884, p. 193.

DISCUSSION.

Dr. Noyes: The effects described in the doctor's paper are truly remarkable, and point to many useful applications of this new agent. I have myself removed a pterygium without the use of any anæsthetic, the patient declaring that the operation was painless. It must be remembered that the susceptibility of different individuals differs widely, and we must not, therefore, draw sweeping conclusions from a few cases.

Dr. Carstens: The property that has just been demonstrated should render the muriate of cocaine valuable not alone in ocular surgery, but in operations elsewhere, particularly, perhaps, in uterine surgery.

Dr. Maire: The thanks of the Academy are due the doctor for bringing these new and important facts to their notice. The new anæsthetic will find important applications, no doubt, also in laryngology. It will be an invaluable aid to the physician in the troublesome operation of removing foreign bodies from the eye.

Dr. Gilbert: The agent may perhaps be put to a still more extended use, if it shall be found that it is capable, also, when injected into the cellular tissue, of producing local anæsthesia. Many minor surgical operations could thus be undertaken without resort to a general anæsthetic.

Dr. Cleland: The observations already made open a wide field for experiment. The effect of coca is analogous to that of tea and coffee, and these effects are, perhaps, in reality due to the influence of the respective alkaloids in these plants over the sensibility of the nerves. I have found that a solution of caffeine, two grains to the ounce, has a marked soothing effect upon the mucous membrane of the pharynx in certain cases of painful inflammation. The solution is applied in the form of a spray. Its effect is, however, transient.

Dr. Lyons: Physicians have generally been disappointed heretofore in coca. They have not found it the sustaining, strength-giving agent they have been led to expect, and most of them, after a few trials, have discarded the remedy as worthless. Except as a means of combating the opium habit, or the whisky habit, they have found it inferior to other agents. This is possibly because they have started with an erroneous idea of its

physiological and remedial action. It is altogether possible that its effects from first to last are due to its power of obtunding the sensibilities. The same thing may be true of tea and coffee, as it unquestionably is of tobacco and alcoholic stimulants. All of these are popularly believed to supply strength, whereas it may be that they do no more than to remove the sense of fatigue and exhaustion, which nature intends as a signal to remit effort. Coca, when chewed, benumbs the tongue; the quality of the drug can be roughly judged by this property. The numbing effect is very different from that of aconite, being unaccompanied by any peculiar positive sensation. Another drug which affects the tongue in a similar manner is Jamaica dogwood. It seems probable that this drug also may prove useful for the production of local anæsthesia. Its active principle has been isolated—a crystallizable substance, which, however, is almost completely insoluble in the menstrua which must be selected for the application of a local anæsthetic. Even strong alcohol scarcely dissolves it, except by the aid of heat. More attention should be paid to these local anæsthetics. If the eye can be rendered completely insensible to pain by the application of a few drops of a solution of cocaine, the surgeon will no longer think of resorting to a general anæsthetic in operating on the eye, and the day may be not far distant when the surgeon will recall with amazement the reckless use by a past generation of chloroform, ether and nitrous oxide.

Dr. Chittick: I have witnessed a number of Dr. Connor's experiments, and think them very suggestive. It has occurred to me that the muriate of cocaine might prove a useful remedy in hay fever—perhaps in combination with belladonna and other standard remedies.

Dr. Long: The effects of coca, while they resemble those of tea and coffee, are distinctly different. I have observed that where I have used the coca it has tended to produce sleep, while caffeine, as we all know, has an opposite tendency.

Dr. Yemens: A case I have recently seen suggests some interesting questions pertaining to medical jurisprudence. The body of a man was found on the bank of the river with three bullet holes in the skull. There were no powder marks visible, and yet the circumstances seemed to point to suicide rather than to murder. Some experiments have recently been made to ascertain what is the minimum distance from which a pistol can

be fired at an object without producing powder stains. These seem to show that it is impossible for a man to shoot himself with a pistol without showing marks from the burning powder, and yet instances which have come under my own observation distinctly contradict this conclusion.

Adjourned.

OCT. 28th, 1884.

The academy met at the office of Dr. Andrews. In the absence of the president and vice-president, Dr. Noyes was appointed chairman of the evening.

WRITTEN COMMUNICATIONS.

Dr. Chittick read for Dr. Wyman a paper on specialists and specialties in medicine.

PREVAILING DISEASES.

Dr. Gilbert: We have had lately in my vicinity two fatal cases of diphtheria. In this instance we can scarcely attribute the disease to any defect in the sewers; the sewerage in that part of the city is good.

Dr. Jenks: A patient of mine from Wyandotte tells me that diphtheria is prevailing there as an epidemic. A druggist there put up the other day as many as forty prescriptions for patients with diphtheria.

Dr. Andrews: I have seen several cases of rather peculiar gastro-intestinal disturbance. I regarded them as duodenal catarrh. In some of the cases there was looseness of the bowels. There was generally slight febrile disturbance at first. There was suppression of the biliary secretion, clay-colored stools, in one or two instances jaundice. All have yielded to such remedies as relieve congestion of the gastro-intestinal mucous membrane. I generally prescribe a mercurial followed by a cathartic—then phosphate of sodium, and the vegetable cholagogues such as wahoo, etc. Ox gall in children has been useful, in doses of $1\frac{1}{2}$ grains for a child of three to five years old.

Dr. Chittick: I saw one of these cases in which the jaundice was quite marked.

Dr. Carstens: I see a case of diphtheria here and there, and a little typho-malarial fever. I have also seen some cases of bowel trouble such as Dr. Andrews describes. I have connected them with dysentery, which has prevailed during the summer.

Dr. Gillett: I have seen a few cases of diphtheria, but I do not think the disease is as prevalent as it was last year, and it has not

been very severe. I have had only one fatal case.

Dr. Yemans: I am surprised to learn that there is diphtheria in Wyandotte; there are no sewers there.

VERBAL COMMUNICATIONS.

Dr. Jenks: I wish to speak of one case which presents some peculiarities. On the eighth of this month I removed an ovarian tumor, one of the largest on record. It must have weighed more than 100 lbs. The actual weight of the tumor removed was 95 pounds. The case did not seem a promising one for an operation. There was some peritonitis existing, caused by rupture of some of the cysts. The tumor was found to be very friable, so that it was impossible to remove it without rupturing some of the cysts. I should think that more than a gallon of fluid must have escaped thus into the peritoneal cavity. The question might be asked whether an operation was justifiable with peritonitis existing. In fact, operation offered the only chance of prolonging life. The patient was burdened with the immense weight of the tumor; breathing was becoming very difficult. The contents of the tumor consisted of a thick fluid almost like jelly. All over the peritoneum in front there were spots looking like fatty degeneration. At the time of the operation, I could not give an encouraging prognosis, yet the patient has made a good recovery.

Dr. Yemans: I am sure the doctor is to be congratulated on the favorable result of his operation. I have noticed that in other cases the presence of inflammation does not, of necessity, contraindicate an operation, as in cases of cystitis.

Dr. Noyes: I have been present at a good many operations for ovariectomy, and have seen many very bad cases. It has happened over and over that patients I thought would surely die have recovered. Sometimes there would be firm adhesions, rendering necessary extensive dissections and the application of numerous ligatures, and yet where everything appeared so unpromising the patient would make a good recovery. On the other hand, in many cases where everything seemed favorable, the patient has died.

Is there any way of knowing positively before an operation whether peritonitis exists or not?

Dr. Jenks: No, we cannot be sure that no inflammation exists, but if there is any very extensive inflammatory action we shall have

a rapid pulse, high temperature and local tenderness.

It seems to me that recovery in the cases that seem least favorable is not altogether inexplicable. In cases particularly where there has been repeated rupture of cysts, setting up inflammatory action, the removal of the tumor puts a stop to the irritation that is wearing out the life of the patient. I believe, accordingly, that it is best, as a rule, to delay operation until there has been some constitutional disturbance produced by the tumor.

Dr. Noyes: In some of the cases I have seen, the thick, gelatinous fluid from the cysts has escaped into the abdominal cavity, and yet has not produced fatal peritonitis.

Dr. Jenks: I should like to inquire whether any one has seen a case recover where there have been firm adhesions to the bladder. I have never seen a recovery under such circumstances.

Dr. Noyes: I wish to report further on the after-effects produced by the muriate of cocaine, which was applied to my eye at the meeting of the Academy last week. The solution produced considerable smarting at the time, but I did not feel any inconvenience following until the second day after the application. There then set in decided inflammatory reaction, lasting a day or two. Whether this was due to the muriate of cocaine itself, or to the possible presence of free acid in the solution, I will not undertake to say, but the effect must be noted as something to bear in mind in the use of this new agent.

In this connection, I wish to recall to memory a local anæsthetic which twenty years ago was for a while very popular. This agent, rhigolene, was first brought to the notice of the profession by Dr. Richardson in 1855. It was introduced into this country by Dr. Bigelow, of Boston, who was very enthusiastic in regard to it. It was employed in minor surgical operations, such as the removal of nævi, etc. Now it seems to be quite forgotten.

Dr. Andrews: Fred. Stearns has not forgotten it. It is the inflammable nature of the article that has made the surgeons afraid of it.

Dr. Noyes: Cocaine only affects the superficial structures of the eye. It does not destroy sensitiveness in the deeper parts, as, for instance, the iris. It has been used now in about 30 cases in New York, one a case of double cataract.

Dr. Connor: Out of the twelve persons experimented upon by myself, in only three were there any irritating effects produced.

In all of these cases I think there was lowered vitality, and I shall bear this in mind in my future use of the anæsthetic. In one case there was considerable inflammatory action, attended with infiltration of the cornea involving two-thirds of its circumference.

Adjourned.

NOV. 11, 1884.

The Academy met at the office of Dr. Jenks, Dr. Long presiding.

WRITTEN COMMUNICATIONS.

Dr. Clark read an interesting paper on "The Chloroform Habit." See LANCET, Dec., 1884.

DISCUSSION.

Dr. Noyes: I can speak from experience of the danger there is in having chloroform about. When this anæsthetic first came into use, I found that it had a great fascination for me. I would inhale a little of it when I had a headache, or when I felt out of sorts, dispirited, etc. The sensations it produced were very delightful to me, but I found that there was danger in making such a use of it. Once I was nearly overcome by the drug. It is never safe for a person to administer chloroform to himself. It is impossible, of course, to watch the effects. I once chloroformed myself when I was about to have a carbuncle lanced. I told the surgeon that I would give him a signal when I was ready for him to begin. But I forgot to give the signal, and the next I knew I was coming to myself after the operation, and taking the surgeon to task for not doing what was already finished. Deaths from chloroform are often the result of mere carelessness. I have seen two such cases. One case was in a hospital in London. The assistant who was entrusted with giving the chloroform, was paying no attention to the patient, being absorbed in a discussion between Dr. Bowman and Dr. Crichett. The patient struggled to get up, but the assistant only held the chloroform more closely to his face. Presently I noticed a change in the patient, and putting my finger on his wrist I found the pulse gone, and in fact life was extinct. Again, in Berlin, a patient was operated upon soon after eating a hearty meal. After the operation, he was left alone, at least with only a female nurse to attend him. In a few minutes the nurse ran out, saying that the patient was dying. He had vomited as he lay on his back,

and the regurgitated matters had entered his windpipe and suffocated him.

Dr. Connor: My knowledge of this subject is derived entirely from what I read in the medical journals. I should judge that this practice of chloroform tipping is increasing.

Dr. Chittick: I think the description quoted by Dr. Clark from Erichson of the effects produced by chloroform, is overdrawn. I do not think I ever saw it act so badly.

Dr. Bradley: I have never recommended to patients the use of chloroform by inhalation. I have prescribed an aqueous solution, to be taken internally. The chloroform can be dissolved in water by the intervention of glycerin; such a solution is very useful for relieving gastralgia, nervous headache, etc.

Dr. Wyman: My attention has been directed to this habit by some distressing circumstances that have occurred among my own acquaintances. Dr. Whiting, alluded to in the paper read, was a personal friend of mine, who began to use chloroform occasionally as a student. The quantity of the drug, which at last proved a fatal dose, must have been very small. The bottle from which he inhaled it was found, after his death, nearly full, and securely corked. I have so great a fear of this drug that I make it a rule never to administer it alone. The one who gives the chloroform should have nothing to take his attention for a moment from the condition of the patient. We cannot be too careful with chloroform.

Dr. Gilbert: I have very often used chloroform, especially in parturition, and never with any unfortunate results. When I use it in these cases I do not push it to the production of complete anæsthesia.

We ought not to recommend or permit our patients to use chloroform themselves, any more than we should advise them to use alcohol as a means of procuring sleep. It is much easier for a physician to prescribe some palliative remedy, some narcotic for instance, to relieve pain, than to seek out and remedy the cause of the patient's suffering, and the physician gets more credit for the first than for the last; yet he only abuses the confidence of his patient when his treatment begins and ends with the momentary relief of distressing symptoms, and he is not worthy of his profession if he ever sacrifices the permanent to the temporary good of his client.

Dr. Wilson: I can relate one case illustrating the danger from chloroform. It was that of a young man who took the chloro-

form to relieve toothache, and nearly lost his life from strangulation.

Dr. Cleland: I was much pleased with the paper read. I was especially interested in the account given of the symptoms produced by the habitual use of chloroform. I have had some experience in my practice with chloroform habitués. Among the symptoms in those confirmed in the habit are pallor of the face, from reduced capillary circulation, bagginess of the eyes, forgetfulness, especially during and after the sprees, impairment of the perceptive faculties. In some cases there is produced under the immediate influence of the drug relaxation of the sphincters, and involuntary passages from the bowels and bladder in consequence. The heart's action becomes feeble, pulse rapid and weak; there are aberrations of sight and hearing.

As regards the continuous use of chloroform during parturition, I think the results are bad. The immediate danger is of post partum hæmorrhages, which are apt to occur unless one is on the watch for them. Reparative power is also diminished. You are more likely to have breast difficulties, gatherrings, etc.

I believe the chloroform habit is growing, in a larger ratio than the use of opium. Druggists report that they sell a great deal of chloroform. Physicians should discountenance strongly the self administration of this agent.

Dr. Jenks: I have not come in contact with many chloroform habitués. With regard to the use of chloroform in midwifery, I have certain fixed theories. Chloroform should not be given too early in the case. It should never be pushed to the extent of producing unconsciousness, except when painful operations are to be performed. It has been my practice to mix chloroform with cologne, and allow the patient to inhale the mixture. Ether is more objectionable in midwifery than chloroform. It affects the child injuriously, and may even prove fatal to it. I have seen a child born in an intoxicated condition from the influence of ether; never from that of chloroform. In surgical practice I do not use much chloroform. In minor surgical operations, it is unnecessary to place the patient profoundly under the influence of the anæsthetic. There is a period of diminished sensibility before there is complete loss of consciousness, and that is the time to operate.

Dr. Connor: It has always seemed to me that in using any anodyne, we practically put the patient on the way to death. Hence the

use of such remedies should never be lightly indulged in. We assume a grave responsibility when we give a patient opium or chloroform. Anæsthetics, especially, are used to produce a partial death; how can the surgeon be careless in their use? Among the thinking portion of the community there is developing a feeling of antagonism to the regular medical profession on account of their recklessness in the use of deadly narcotics.

Dr. Noyes: One or two words on a point that has not yet been mentioned, viz: on the importance of seeing that the patient comes to an operation, if possible, with an empty stomach. An anæsthetic should never be given without a previous examination of the condition of the heart. In regard to anæsthetics in midwifery, when ether was first brought into use more than thirty years ago, Dr. Channing very strongly urged its value. I was in the habit of using it, myself, only in the later stages of labor.

On motion further discussion of this subject was postponed to the next meeting of the Academy, and Dr. Cleland was requested to open the discussion on that occasion.

Dr. Chaney exhibited an interesting pathological specimen, obtained post mortem. The patient was a soldier during the war, and has ever since been disabled and a pensioner. He has had chronic diarrhœa, varicose veins, and other troubles. Later his abdomen began to enlarge, and after much suffering, with dyspnœa and difficulty in passing water, etc., the patient finally died a few days ago. The abdomen was found to contain several tumors, the largest of which was situated in the right iliac region, and firmly adherent to surrounding tissues. The tumors were found to contain a great number of spherical hydatid cysts, from the size of a pea to that of a child's head, containing a clear transparent fluid. The smaller ones looked exactly like a crystalline lens. Microscopic examination had not as yet demonstrated the presence in these cysts of the hooklets characteristic of hydatid cysts, but more thorough examination was to be made.

Adjourned to the dining room, where discussion of something more interesting than morbid conditions and appetites engaged the attention of the Academy.

A. B. LYONS, M. D.,
Secretary.

W. H. LONG, M. D.,
President.

A Synopsis of a Meeting of the Grand Rapids Academy of Medicine, Held Nov. 25, 1884.

Dr. E. Watson read a paper on diphtheria. The points especially noted were as follows: As to the cause of diphtheria he does not know, but considers it a specific poison, transmitted by atmospheric influence rather than contagion; does not consider it contagious, except from actual contact with the putrid matter from those sick with the disease. As to the various theories which have been advanced regarding the cause of the disease, Dr. Watson does not believe it is caused by or invited by filth or foul air, nor by over-crowding of persons in badly-ventilated apartments; nor does the season of the year have any effect on the disease. All suffer alike, the rich the poor, the clean or dirty, on high or low ground; on the dry and healthful prairies of the far west, as well as in the old and crowded cities of the east. Dr. Watson considers the disease purely constitutional, and that the throat trouble is merely a symptom of the disease, that we see many cases of true diphtheria without any local manifestation.

Concerning the treatment, he has no faith in medication, except for local effect. Our attention should be directed entirely to an effort to retard or arrest the formation of false membrane, which is the greatest source of danger to the patient; advises the use of powerful astringents for this purpose, selecting such as are as free as possible from caustic or irritating properties, preferring Monsel's solution in combination with glycerine, continuing this treatment until there is evidence of an arrest of the growth, or formation of false membrane; condemns severely the use of tincture of iron and potassium chlorate, except locally as astringents. As to the exposure of the patient suffering from diphtheria to the cold air, Dr. Watson has observed that such as carelessly exposed themselves to breathing cold air appeared to do the best. In cases of children who do not or can not take medicine, or clear the throat or air passages, the syringe should be used, especially if the membrane has invaded the nasal passages, which not only greatly and dangerously interferes with the child's breathing, but if neglected, will be a source of blood poisoning from absorption of putrid matter.

Dr. Boise believed, with the reader, that there was danger of over-medication; did not find it necessary to use large quantities of

stimulants. Had formerly used iron and potassium chlorate alternately; kidney troubles sometimes followed, which might have been caused by the potash. He now used the muriate of ammonium instead; used very little local treatment. If the patient were old enough he used an iron gargle or brushed the parts with iron, but his main reliance was on constitutional treatment. Had more deaths from kidney trouble after the disease than from the diphtheria itself. Thought albumin in the urine one of the marked features of the disease, but did not think there was an inflammation of these organs, only an irritation, but when extra work was given them to do, as when potas. chlor. was exhibited, these organs became further irritated, and a nephritis ensued, causing uræmia and death.

Dr. Johnson thought there was but little satisfaction in discussing this subject, because our positive knowledge of it is so meagre; as to its cause no definite opinion can be formed. It occurs under a great variety of circumstances and conditions; in high and healthful sites, as well as in low and unhealthy ones; amongst the cleanly and well-fed, as well as amongst the filthy and half-nourished. The kind of water employed, and the condition of sewerage seemed to have little or nothing to do with it. Nor does it seem to be contagious in the ordinary sense of that term, not contagious as small-pox and measles are. The morbid exudates seem, under certain conditions, to be infectious; beyond that its contagiousness has not been proved; perhaps the secret lies in atmospherical conditions. He thought the disease essentially systemic, not local, the local symptoms being merely a part or phase of the constitutional involvement. As to treatment he is inclined, after large experience, to a mild plan. There is, so far as now known, no specific or abortive method. Tincture of iron and chlorate of potash he has tried and rejected. They seemed to him to do harm; they certainly weaken digestion and assimilation without exerting any appreciable control over the disease. Quinine is of doubtful service. For a few years he has used muriate of ammonia and thinks well of it. It certainly has some specific influence over the faucial secretions. He gives to the adult 8 or 10 grs. every three or four hours, in a tablespoonful of water. To a child of, say four years, he gives 3 to 4 grs. He also thinks well of whisky after the stage of feverish excitement is over. Lately he has, in a few cases, used the solution of muriate of lime. It seemed to do well, but

the test has been too limited to justify a recommendation. At present the cases are mild, as there is no epidemic distemperature. He has very little reliance on topical treatment, and regards all harsh means as injurious, except in cases in which obstructed respiration demands relief.

Dr. Watson's cases, if not speedily fatal, generally recovered. Such has not been his observation. His fatal cases often ran on two or four weeks, and then apparently died of exhaustion or paralysis. He thought it not difficult to distinguish between diphtheria and other affections involving the throat. The dusky or ashen color of the mucous membrane on which the exudation rests, the continuous character of the latter, which is not in spots or patches, as in other affections, the characteristic constitutional symptoms; and, lastly, the frequent or perhaps invariable presence of albuminous urine, are sufficient to establish the diagnosis.

Dr. Shurtz had lately employed the bi-chloride of mercury in doses of $\frac{1}{8}$ gr., and esteemed it more than any other remedy he had ever tried.

Dr. Holley was of the opinion that it was a constitutional disease, although a catarrhal sore throat may develop into diphtheria. Thinks it not usually severe unless it becomes epidemic. In malignant cases nothing can be done. Never observed *nephritis* following the use of iron, but thought it might occur from the use of potassium chlorate. In the putrid sore throat of New England in 1735 and 1736, calomel was first used by Drs. Douglass and Osgood. Lately the bi-chloride had come into use, and Dr. Pepper had given some striking illustrations of its use.

Dr. Kirkland spoke of steam as a useful remedy to alleviate the dryness and pain in the throat when that was a disagreeable symptom.

Dr. Halle was an advocate of the bi-chloride of mercury in even smaller doses than mentioned by Dr. Shurtz. He had used the time-honored remedies, iron, potas. chlorate, quinine and whisky, but found nothing so efficacious as small doses of the mercury, frequently repeated. He uses whisky, however, in the depression following. Thinks the *nephritis* due to the diphtheritic poison, and not the administration of iron or potas. chlorate. He had found no case of diphtheria without albumin in the urine.

Eighty cases of hydrophobia have recently been reported in Vienna.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The Work of the Committee on the Washington Meeting of the International Medical Congress.

THIS committee held a meeting in Washington, Nov. 29, 1884. The following is a condensed account of their work:

The congress will be composed of members of the regular medical profession, who shall register on the books of the congress and take out the tickets of admission. The American members of the congress shall be appointed in the same manner as the delegates of the American Medical Association, each general and local society being entitled to appoint one delegate for every ten of their membership. All members of committees appointed by the general committee shall be entitled to membership, together with such other persons as may be specially designated by the executive committee. All societies entitled to delegates are required to appoint the same at their last regular meeting preceding the meeting of the congress, and furnish the general secretary with a certified list of delegates.

The work of the congress will be divided into eighteen sections.

The general meetings are reserved for the transaction of the general business of the congress and for addresses or communications of interest more general than those given in the sections. Questions which have been agreed upon for discussion in the sections shall be introduced by members previously nominated by the officers of the section. Those introducing discussions shall present a statement of the conclusions which they have formed as the basis for debate.

Notices of papers to be read in any section, together with abstracts of the same, must be sent to the secretary of that section before April 30, 1887. These abstracts will be kept confidential and not published till after the congress. Papers relating to subjects not included in the list of subjects suggested by the officers of the various sections will be received. If any member desires to introduce a subject after April 30, not on the programme, he must give the general secretary notice at least twenty-one days before the opening of the congress. The section officers shall decide as to the acceptance or rejection of any communication offered the section, and fix the time of its presentation. No commun-

ication will be received which has been already published or read before another society.

All addresses read or papers shall be immediately handed to the secretary after reading.

The executive committee shall proceed after the congress to the publication of the proceedings, and shall decide as to what papers shall be published.

The official languages are English, French and German.

No speaker shall be allowed more than ten minutes, except in reading papers and introducing debates, when twenty minutes will be allowed. All rules, etc., will be published in the official languages. The debates will be printed in English, the papers in the language in which they were delivered.

The officers are those usual in such bodies, and will be nominated by the general committee. Executive and finance committees are appointed also by the general committee.

The committee elected as president, Dr. Austin Flint, sr.; vice-presidents, Dr. Alfred Stille, Philadelphia; Henry I. Bowditch, Boston; Dr. R. P. Howard, Montreal; general secretary, Dr. J. S. Billings, Washington; treasurer, Dr. J. M. Browne, U. S. Navy; executive committee ex-officio, the president, general secretary, and treasurer; Dr. I. Minis Hays, of Philadelphia; Dr. A. Jacobi, New York; Dr. Christopher Johnson, Baltimore; Dr. S. C. Busey, Washington.

This committee will proceed at once to the completion of the organization. Thus the skeleton is formed for a most successful meeting, one creditable to all concerned.

The Relation of Certain Diseases of the Eye to Gout.

In his Bowman lectures, recently delivered to the British Ophthalmological society, Mr. Johnathan Hutchison discussed the relations of gout to certain eye diseases. By gout, he means all states of health which are either directly or remotely connected with the accumulation of lithate of soda in the blood, as the result of over-feeding or defective assimilation. Among the eye diseases which he finds related to the gouty state are:

1. The hot eye, a name for peculiar short attacks of congestion of the eye. The conjunctiva feels hot, becomes red, and pricks as if sand were in it. The attack may come on within half an hour after the offending meal, and last from a few hours to several days. Owing to interference with the ciliary muscle vision is slightly dim, and all the attempts at

accommodation are usually painful. In the intervals of the attacks the eye is usually quite well. Its definitely paroxysmal character, its sudden development, and very complete and rapid disappearance especially mark its gouty character. Those liable to this form of eye disease not unfrequently have iritis. Sharp pains in the eyeballs not unfrequently attend the gouty state. Many eyes in young persons, that are irritable and easily tired are associated with inherited gout. In these cases glasses do no good.

2. Of arthritic iritis he mentions five varieties, with well-marked peculiarities.

3. Relapsing cyclitis is a peculiar form of this disease. Its peculiarities we have called attention to in other pages of the LANCET. Neuritis, glaucoma, retinitis hæmorrhagica are some of the other diseases traced to gout.

The author summarizes his conclusions thus: The affections of the eye due to gout are grouped under (1) those which go with acquired, humeral or acquired gout; (2) those which depend upon the inheritance of structures damaged, or at any rate specialized, by gout in predecessors. It is needless to add that in almost all cases of acquired gout, there is inheritance also; and that in many, in which the disease is chiefly caused by inheritance, some modification and increase may have been derived from personal habits. Still the difference between the two classes of affections is very marked. In the one, attacks of a transitory nature are the rule, and these attacks are often acute and attended with much pain. In the second group, although a tendency to temporary recovery and recurrence is often observed, yet there is a great proneness to chronicity and persistence.

The invasion is often insidious, but the disease is usually in the end destructive. In the former group we have placed hot eye, scleritis, recurrent iritis, and retinitis hæmorrhagica. All these are diseases of adult life. In the second group, we have insidious disorganizing iritis, relapsing cyclitis, certain forms of soft cataract, and perhaps some of primary optic neuritis. The difference in treatment of these two classes of eye diseases is as marked as their clinical differences. In the first, the well-known measures against gout must be taken; a restricted regimen, alkalies, colchicum, and aconite, and liberal counter-irritation. In the second, we must use tonics, although counter irritants are often valuable; we cannot trust to any measure as really curative aside from change of climate."

All ophthalmologists and general practi-

tioners will find these remarks very suggestive, as even in the United States, we have cases coming under the causation mentioned.

How Did Genoa Prevent a Cholera Epidemic Last Year?

Many persons are unable to believe that sanitation will protect from cholera, and other infectious diseases. For such, actual examples of sanitation are of value in aiding them to overcome their unbelief. The United States Consul at Genoa, in a communication to the State Department gives an account of the means by which the cholera plague was managed there. As a result of the sanitation cholera was driven out and kept out of that city and province.

He says: "To summarize—Since the outbreak of cholera at Toulon and Marseilles a continual purification of streets, alleys, private and public houses, has been kept up, the most powerful disinfectants being used for the purpose, which has made the city all summer, as it is to-day, one grand smelling-bottle of sulphur, chlorine, etc. Impure water, or water supposed to be impure, was shut off from the city; stale fruits and vegetables offered for sale were seized and destroyed; this year's wine crop was not allowed to be brought into Genoa, and all wine shops were forced to be closed at 8 p. m., daily. The rules were rigid in regard to household cleanliness, and the use of disinfectants in whitewash, and if the owner of an establishment of any size heeded not the orders of those in authority the work would still be performed, and at the expense of the proprietor."

As showing the relation of impure water to cholera, he says: "In three hundred cases of cholera before the Aqueduct Nicholas was shut off from the city, there were two hundred and seventy-five deaths, and all the victims had been using this water. Since the water was shut off from the city the cases were few among those who could obtain good wholesome food. It is evident that pure water is essential to health. The Sunday excesses among the laboring classes proved a powerful feeder to the epidemic. From this fact it appears that regular habits of work or play are essential in avoiding cholera. The doctors all said that substantial food proved a better means of battling with cholera than doctors' medicines. The Consul concludes: "Let a city or town have officials who energetically and fearlessly fight everything which has a ten-

dency to prey upon public health, granted the people abuse not nature; let substantial food be one's daily portion; to all these things add a frame of mind prepared to face calmly and bravely whatever trials and vicissitudes may cross one's path, and you have an armor that will, I am positive, in nine hundred and ninety-nine cases in one thousand baffle the type of cholera which has lately raged in Genoa."

The Confessions of a Veteran Medical Journalist.

For twenty years the editor of *Gaillard's Medical Monthly* has toiled as a medical editor. Most, if not all, of the time he has also been a medical publisher. That he has had severe bereavements and many physical obstacles to overcome is generally known. But he has surmounted all, and his journal regularly appears. In his late issue he indulges in some retrospective reflections, if perchance they meet a response in the minds and hearts of his subscribers, and induce them to pay him the amount of their subscriptions. He says the opening of the twentieth year "shows twenty years of toil, patience, fortitude; and in the record there are very many hours of pain, sickness, and even prostration; hours when to stop would have been happiness, and when nothing else urged the writer forward, but that the work had been paid for and was due, and that a life avocation deliberately chosen must be carried though to the end, or until the son could take the father's seat." If this testimony can induce any medical brother who is contemplating similar work to turn away from a field of such severe and endless toil, this result will be an ample reward for the confession made. The correspondence, the library and the exchanges bring great happiness. The real thorn of such a life is that all subscribers do not promptly pay the publisher his dues. We doubt not that many medical editors who are also their own publishers can fully sympathize with brother Gaillard. But there is an increasingly large class that have no direct interest in the subscription list, in so far as the money is concerned. Doubtless this tendency will increase. Yet here, as in other journalism, it must be that in the long run those journals will exert the widest and best influence, which are at least partially owned by their editors. In short, when the editor is the head of the business of a journal as well as the head of its editorial management, then we may expect the

greatest vigor of effort. When an editor makes an entire life work from a medical journal, then will he do his very best for the journal. But so long as most editors are compelled to regard their journal work but a side issue of their regular business of practicing medicine, so long will medical journalism fail of its highest ends. As we understand, Dr. Gaillard has lived from the publication of his medical journals, excepting the emoluments of his relations to medical colleges. We shall hope for him another twenty years of medical journal work, even better than the twenty years he has already completed.

Medical Charities.

Under the term of medical charities, are included hospitals and clinics. The private clinics are for private purposes other than charity, and many of the public ones are conducted towards the same end. But of these perversions of genuine charity we do not now speak. Our attention has been especially attracted to this subject now, by an address delivered by Mr. Sampson Gamgee, of Birmingham, England. With the practical workings of the medical charity of dispensaries, Dr. Gamgee is especially familiar. In fact, the English seem to regard him as an authority in such matters. In the address referred to, he says that out patient relief has almost ceased to be a charity. It is given in an irrational and indiscriminate manner. The result too often is a maximum of moral harm and a minimum of physical good. From the crowds that gather at such charities, the physician is, practically, prevented from doing his best work. So many must be dispatched in a certain time. Careful diagnosis and treatment is simply impossible with the present conduct of most dispensaries. We question whether any person who has done any extended work in these institutions will gainsay this statement. Hence it follows that neither scientific medicine nor humanity gets that which it should get from medical men. The conditions are all bad and need rectifying. What shall be the relief for this state of things? Mr. Gamgee says that the working classes should have a share in the management of these dispensaries. In this manner he hopes that the idle and shiftless will be kept where they belong. He would have the working classes taught to feel that they are not mere objects of charity, but having contributed to the support and direction of an institution, they are not ob-

jects of charity when they ask for assistance from this institution.

The practical organization of a dispensary upon the basis suggested, would be in this country a great task in most communities. It calls for an actual education of the classes it is proposed to benefit. The general principle urged, the preservation of manly independence in the giving of charity, cannot be too strongly maintained. Most dispensaries devote all their energies to pauperize the poor. Is a change in them possible?

Reform in Medical Training.

The sound of this word reform is heard on every side. True, some of it seems to outsiders as a trifle insincere, as intended simply to keep up a pretence of doing when there is no intention of moving in advance. But much of the reform movement is in dead earnest. It grows every year in intensity and volume. Actual results are also observable. Most advocates of it are without a definite plan toward which to work. Hence their efforts do not have the force of well-directed energy.

In a late issue of his journal Dr. B. W. Richardson, of London, presents the object of his efforts in the following terms:

"It seems to me, therefore, inevitable that we shall come back to the only splendid system of teaching medicine in the past; that once again every medical practitioner will have his pupil, who for three years or so will acquire an amount of knowledge and skill which nine out of ten students miss in their hospital career; that the pupil thus prepared—by a master, who was himself benefited by having been a master—will pass into the hands of greater masters, who make the art of teaching the sole art of their lives, and that entering the practice of his profession by his examination, separated entirely from all other interests except those of the public, expressed through the state, the qualified practitioner will begin his career with an enthusiasm as well as an untrammelled mind."

If only a public examination, fully recorded, by state authorities, shall be made a living fact all other questions shall take care of themselves. When and where the pupil shall study will be matters of relatively little importance. He will then get such teachers as will train him in the least time, with least expense, and most pleasantly. The old preceptorship may well then come in as an im-

portant aid in practical instruction. Opportunity will be afforded such as have pre-eminent teaching ability to devote their entire time and strength to this art. It strikes us that this end is a desirable and a very practical one to seek after.

The Stoning of a Doctor.

On reading this caption, the mind will at once wander to the heathen Chinese, the blood thirsty Bedouin, the swarthy Malay, or the savage African. The stoning of a doctor in Africa, in China, in India, in Arabia, would excite no surprise. But the event referred to occurred in Boston, Mass.—polite, aristocratic, learned, cultured, a city full of wealth, enterprise, schools, churches, the seat of Harvard Medical College. We quote from the *Boston Med. Jour.*, Dec. 11th, 1884. The place of stoning was South Boston. The person stoned was a dispensary physician. It seems that the doctor did not take kindly to the stoning by the crowd. He actually resented the injury so far as to hit one of the smaller members of the attacking gang with the handle of an umbrella. The party struck was the son of a local politician. This politician had the effrontery to bring civil and criminal suits against the doctor for hitting his son. The local court sided with the local politician. The cases were finally settled by the doctor paying the local politician one hundred and twenty-five dollars. Not only has the doctor shaken off this dispensary service, but the authorities have closed the dispensary entirely.

This is one of the very few cases in which a doctor has been maltreated while in the pursuit of his humane and charitable vocation. All the details of the case are not given, but enough is reported to show that the heathen dwell in Boston, and that missionaries are called for in the hub of the universe. But it is evident that the particular dispensary doctor alluded to in this account will not be a success as a missionary. No doubt he was a Harvard graduate, but he was unequal to a South Boston band of roughs.

The Plague in the Mountains of East Kentucky, Etc.

During November and December there prevailed a very fatal form of disease in the Cumberland mountains between Kentucky and Virginia. The locality is far from rail-

roads, or water communication, or, indeed, from carriage roads. For many weeks no rain had fallen in this region. The sources of the water supply of the dwellers of this region are mountain springs and streams. Many of these originate or run through strata of earth containing alkalies, and arsenates, etc. It is believed from data thus far made public that the long drought so concentrated the poisonous elements in the drinking water as to bring about a mineral poisoning in those drinking it. The food supply has been bad, not alone from the drought of this year, but also from that of former years. The disease is described as a flux. It runs its course in about two days, and is usually fatal. Whole families, and even settlements, are said to have been speedily swept off. The number estimated to have thus died is reckoned by the thousands. When it is remembered that this region is a wilderness, and but sparsely settled, it seems as if the region was being depopulated. The people are not at all frightened at the state of affairs. Being of the happy-go-lucky temperament, they go along apparently unmindful of the calamity that has fallen upon them. Making all due allowance for exaggeration, the situation is still a terrible one. More authentic accounts will probably soon reach us.

Shall We Have a New National Board of Health?

During the second week in December representatives of the several state boards of health met in Washington. Their object was to discuss measures for the protection of the country from the threatened invasion of cholera next year. After due deliberation they decided upon recommending to congress the passage of a bill establishing a National Board of Health. The principle features of this bill are as follows:

This Board shall be composed exclusively of members from the several state boards of health. No pay is to be given for services rendered, only travelling expenses being allowed. The duties of this board are to regulate quarantine, to investigate causes of diseases, and to assist state boards of health. It is thought that the plan of organization is such as to avoid the antagonisms awakened by the old National Board. It strikes us that the passage of the bill will meet powerful opposition, but still it may pass. A board constituted as proposed would be a strong organization. As it is the bill of the several state boards, it must be supported from the several states.

We firmly believe there should be a health department of the government, and that this department should be represented in the presidential cabinet. It is only a question of time when the general popular mind will call for such a representation of the health interests of the nation. We shall watch with interest the struggle made for and against the establishment of the proposed board,

What is Brahma Yan?

This has been widely advertised as the "great Hindoo remedy for deafness." In the *Druggist's Circular* Dr. A. B. Lyons, of Detroit, reports an examination of this article. As it may interest many of our readers we give his results, which fully answer the above question and many others. It seems that he obtained a package which contained two small vials put up in a wooden case, accompanied by a small camel's hair pencil. No. I.—A yellowish coarse powder, weighing one hundred and eleven grains. Of this one hundred and five grains is common salt—containing the usual impurities, magnesium, calcium, sulphuric acid. The powder contains some organic matter (powdered golden seal?) one constituent of which is berberine. This powder is to be dissolved in a pint of water and used for syringing out the ears. No. II.—A hygroscopic brown powder weighing forty-three grains. Thirty-two grains of this powder consists of common salt, about eight grains a vegetable extract containing an alkaloid of some sort. It has the effect of powerfully promoting the mucous secretion, much like jaborandi, but was not identified with certainty. This powder is to be dissolved in a fluidounce of water and applied to the inside of the ear with a camel's hair brush after a thorough course of syringing with warm water and a weak saline solution prepared from No. I.

The value of this remedy will be at once apparent to the most superficial reader, and will enable him to give an intelligent answer to such of the laity as inquire of him respecting the virtues claimed for it.

Medical Art in India Two Thousand Years Old.

The study of ancient medicine has ever a peculiar charm. The *Medical Press and Circular* gives an extract from a recent work published by the great Oriental scholar of Leipsic, Prof. H. Kern. The data were ob-

tained from a set of Buddhist works called Mahavagga. As a medicine the religious orders could, during sickness, take butter, clarified honey and sugar. It was permitted to use as medicine five fat substances, namely, bear's grease, fish oil, Guinea pig fat, pork suet, and asses' fat; also of the different roots in the Hindoo pharmacopœia, such as ginger turmeric, calamus, and andropogon. It was also allowed to prepare and use, infused herbs or teas, curative leaves, fruits, resins, salt powder, eye-salve, even of raw flesh and blood, and to employ as remedies, snuffs and pipes for inhaling smoke. The medical system included the following cures—salves for the rubbing in, three kinds of cupping glasses, many sorts of vapor baths, plunge baths, blood-letting, the use of lancets for cutting out sores, corrosive liquid gargles, bandages, means of cleansing wounds, corrosive alkalies, purgatives, clysters, etc. It is also stated that pipes are described in the most ancient Indian works on the art of medicine. It will be at once seen from this condensed account, that many of the remedies now extant were current among the Indians when the books of Buddha were written.

A Horrible British Superstition.

In the *Medical Press and Circular* Dr. F. W. Lowndes says that the belief still prevails in England that a venereal disease is curable by connection with a virgin. He quotes from many works of forensic medicine to show that these authorities limit it to the cure of gonorrhœa. Dr. Meymott Tidy says that not only is rape common for the cure of venereal disease, but old women doctresses not unfrequently prescribe this criminal attempt to young men who consult them for urethral discharges. Dr. Lowndes says that during the last nine years he has seen many cases, in which this crime was committed. He says that there is scarcely a term of court in his country in which one or more of these cases are not presented.

The crime is a repulsive one in all its aspects. But as it is attached to an old superstition, it will doubtless continue until this superstition is overthrown. Doubtless greater severity in dealing with offenders would exert a wholesome influence in promoting the abolition of this relic of the dark ages. It may be that such a crime is committed in America, but if so, it has never come to our notice.

Memoranda.

Austin, Texas, has five oculists.

Dr. Harvey L. Byrd died at his home in Baltimore, aged 62 years.

The new medical school at Washington, is said to have eight students.

The average income of the physicians of Philadelphia is \$1,200 a year.

Over 10,000 persons are said to have died last summer from cholera in Europe.

The annual product of coca in South America is estimated at 40,000,000 pounds.

The University of Heidelberg will soon celebrate its five hundredth anniversary.

The range of the thermometer at Cincinnati is about 130 degrees. Plenty of variety.

Loomis says a man is young or old just in proportion as his arteries are healthy or diseased.

It is said that, during a late tour in Scotland, Gladstone delivered a speech at the rate of 118 words per minute.

St. Louis has 7,000 wells—a capital means of spreading disease. High water-rates are said to be the cause of these foci of contagion.

Dr. F. A. Mahomed died at his residence in London, November 22d, aged 36. He was an active investigator, and an able medical writer.

Congress seems disposed to provide the means for the erection of a suitable fire-proof building for the Army Medical Museum and Library.

An eminent Boston surgeon advised an equally eminent physician to get a neat Irish girl to rub his leg for a stiffness that followed muscular rupture.

The Clinic of Prof. Schweninger, of Berlin University, is said not to have been honored by the presence of a single student. Perhaps Bismark will attend.

The *United States Medical Investigator*, a leading homœopathic medical journal, says: "Homœopathy has no recognized position in general medicine at all."

During 1883 there were in Austria twenty thousand, three hundred and twenty-three twin births, three hundred and fifteen triplets, and one quadruple birth.

Dr. T. A. Reamy, of Cincinnati (*Cincinnati Lancet*), reports the death of an adult from the hypodermic administration of one-fourth of a grain of morphine.

A son of Dr. J. Marion Sims has presented to the New York Academy of Medicine a bronze bust of his father. It was cast from a marble bust made by the sculptor Du Boi.

Lieut. Greely is reported to have said that of his nineteen men, who perished, all but one were smokers, and this one was the last to die. The seven survivors were non-smoking men.

Dr. Darby says that the men who have been successful in dentistry, have had laborious lives, sacrificing health, recreation and enjoyment, and, as a rule, dying an untimely death.

Dr. Schweiniger has challenged Du Bois Reymond because the latter, the dean of the Berlin Medical Faculty, has refused to recognize him. Reymond refused to recognize the challenge.

It is said that the enthusiasm for transfusion has died out both in England and Germany. Comparatively little is said about it in the United States. It is out of fashion, like broad-toed shoes.

Lower California is said to possess three mountains composed of alum and sulphur. The drugs are almost pure. Their amounts are estimated at one hundred million, and one million tons, respectively.

A simple disinfecting lamp is formed by burning in a common lamp a mixture of equal parts of benzine and bisulphide of carbon. Sulphurous acid vapor is abundantly given off in the burning of the mixture.

During December the death rate in New York city from diphtheria is reported as being over sixty per cent. It is usually fifty per cent. It never leaves the large cities, though it is worse at some times than at others.

The Public Analysts of the United States have met and organized a national Association. An annual conference between these must be of great advantage both to the analysts and the public whom they serve.

An exchange records the fact that cataract is absorbed by the administration of the "*protoiodide of mercury*." New thing in the ophthalmic world. As to the chemistry of this preparation of *mercury*, we are still in ignorance.

Dr. Van De Warker says that while each one must learn for himself the application of the pessary, he will have half learned his lesson who realizes that he is dealing with one of the most difficult departments of gynecology.

To remove foreign bodies from the ear Mr. Jonathan Hutchinson recommends the introduction into the ear of a loop of small flexible silver wire. This being hooked about the foreign body, permits of its ready extraction.

Dr. F. N. Otis (*Med. Record*), says that he has recently given for three months twelve drachms of the iodide of potassium every twenty-four hours to a patient suffering from syphilis. Entire relief followed from all dangerous symptoms.

The receipts of the New York society for the relief of widows and orphans of medical men for 1884 was over fifty thousand dollars. The expenses were less than fifty dollars. The total assets about one hundred and forty-four thousand dollars.

The *Med. and Surg. Reporter* has published an article which the *Texas Courier-Record of Medicine* does not like. It proposes to punish the *Reporter* by inducing his friends to drop the *Reporter* and subscribe for his journal. Better keep cool.

Dr. Frank B. Smith, of "K. & K," Detroit, brought a suit for fifty thousand dollars damages against the Illinois State Board of Health for revoking his certificate to practice in Illinois. The suit has been dismissed, the plaintiff being mulcted in the costs.

Dr. Darby, a dentist of Lockport, New York, estimates the income of the dentist at five dollars an hour. This gives him about nine thousand dollars per year. If he should get ten dollars per hour, he would have eighteen thousand dollars a year.

The University of Sydney has just received about one million dollars from a wealthy colonist who desired thus to perpetuate his memory. We approve of this sort of monument for the dead, only it would be still more satisfactory if constructed prior to death.

The Boston *Med. Jour.* thinks that Wagner's work on the nose is not worth the price asked for it. Its woodcuts are execrable, its typographical errors are simply inexcusable, etc., etc. Perhaps Birmingham & Co. did not invite the reviewer to write a book.

The public analyst of New York city has found large amounts of chrome lead in samples of vermicelli. As a large number of manufactures have been using this coloring, it is well for physicians to remember this source of disease, while investigating obscure diseases.

Not only is the water used for drinking by the people of Philadelphia, polluted, but the ice made from this water swarms with animalculæ, so says Dr. Joseph Leidy. Philadelphians take meat with their drink, whether it be hot or cold, and even with their ice they eat meat. Ugh!

The New York Cancer Hospital receives one hundred thousand dollars by the will of the late General Cullum in addition to the fifty thousand dollars which he gave at its commencement. Mrs. John Jacob Astor gave it two hundred thousand dollars a short time since. In luck.

The *New Orleans Medical Journal* says that, on the morning of his death, the late Dr. S. M. Bemis lectured to his students upon apoplexy, telling them that men of his build were liable to its attacks. He soon complained of feeling unwell, and grew rapidly worse, dying during the evening.

Dr. Atkinson, in the *British Medical Journal*, reports a case of a woman who married at sixteen and died at sixty-four. She had thirty-nine children, all by the same husband, whom she survived. They were all single births, except two twins. All the children lived to reach their majority.

The *British Medical Journal*, November 15th, 1884, reports the death of a boy aged eight, from chloroform narcosis, during an operation. No blame was attached to any person. Two other cases of death from the same cause are reported in the same journal. Three more victims of chloroform anæsthesia.

From the terms of his gift to the New York College of Physicians and Surgeons, it seems that the half million of dollars is to be spent in buying ground and erecting buildings. He should now give a million as a permanent endowment. With the income of this the college could take most advanced steps in advance.

In 1860 Nothnagle and Rossbach wrote in their materia medica thus: "Thus far cocaine has found no medical application, but on account of its extraordinary effects on the nervous system, respiration, on the heart as well

as for its local anæsthetic effect upon mucous membranes, it merits a trial in a variety of diseases."

Dr. Alexander, of Liverpool, corrects intractable retroversions of the uterus, by cutting down upon the round ligaments as they pass through the external inguinal ring, drawing them out the desired extent and then securing the surplus in the wound. This is an ingenious operation for a certain class of cases.

Erichsen says that "During the past twenty-five years there have been many cases of death from chloroform and but few from ether. Hence ether is the safer agent to employ. Yet either agent may be employed for anæsthetic purposes if they be used with reasonable care and be administered with fairly skillful hands."

The police of London, Eng., are, as a rule, nearly as tall as the laborers of Callway—the tallest Britons—and twelve pounds heavier. The criminal classes average forty-five pounds lighter than the police. The fellows of the royal society are among the tallest of the race. The best men of Great Britain gravitate to London.

The *Polyclinic* reports several observations on the excretion of morphine by opium habitues. From a patient taking thirty-six grains of morphine a day, twelve ounces of fresh urine yielded one and two-tenths grain of morphine acetate. While taking twenty-one grains of morphia, the same amount of urine yielded one grain of morphine.

Henry Riley, Esq., in an elaborate article in the *Medical Record*, shows that when a physician attends a case on the call of another person the one calling the physician does not become responsible for the compensation of the physician. This supposes that the person calling does not promise to pay the physician, and is under no legal obligation to pay for the sick person.

A case has recently been decided in New Hampshire by which it is held that when the law requires that patients having infectious diseases shall be removed to an hospital, the law must provide the means of caring for the same while undergoing treatment. In short, the city, county or state must foot the bills when they thus compel citizens to be treated in a particular place.

The use of caffeine hypodermically is of importance in certain cases, indeed, it in

many cases would serve a better purpose than either. Dr. A. B. Lyons, of Detroit, gives us the following formula, which furnishes a clear solution, non-irritating and useful for such purposes as above: Salicylate of sodium grs. XXXIX, caffeine grs. LXI, water to make three fluid drachms.

In Germany a malpractice case was decided against the doctor because he had not employed antiseptic treatment in the case of a wound of the chest. The patient is said to have died of septicæmia. Since the court has thus decided that a doctor must use antiseptics, perhaps it will be good enough to decide which is the antiseptic which will prevent septicæmia and death.

The *Medical Press and Circular* says: "The spectacle of a professor attempting to teach medicine or surgery to a class of four or five hundred students strikes one as absurd, and only shows how fearfully the commercial spirit of the age and the greed for money is sapping and destroying the finest aspirations of men who, to a certain extent, are the victims of a pernicious system."

Dr. Chadwick reports that the Boston medical library now contains fourteen thousand six hundred and ninety-nine volumes. The collection is in most excellent condition, and so arranged as to make it available to the medical scholars of Boston. This is one of the few thriving medical libraries in the United States. It is creditable to all parties, and especially to the librarian, Dr. Chadwick.

Dr. Graham remarks: "That, let a fisherman forsake his boat, or a blacksmith his anvil, or a carpenter his bench, or a shoe-maker his shop, and proclaim that he has made the wonderful discovery that he is full of magnetism and can cure all diseases, and, be he ever so uncouth and ignorant, he is likely to have in a remarkable short space of time a large clientele of educated gentlemen and ladies."

Philadelphia has a school of Biology. It is formed in connection with the University of Pennsylvania. It will be under the direction of Dr. Joseph Leidy. Its prime object will be to encourage individual and original research. Besides its lecture theatres, it contains storage rooms, aquarium rooms, a live-stock room, working rooms, etc., all the appointments of a real working biological laboratory.

The second annual meeting of the Ohio State Sanitary Association will be held at

Columbus, Ohio, Feb. 5th and 6th, 1885. Programmes can be had of the secretary, Dr. A. H. Reed, Mansfield, Ohio. Such arrangements are said to have been made as will insure an excellent meeting, helpful to the cause of sanitation in Ohio. All friends of the movement are cordially invited to be present.

Dr. Lesser, of Lepsic, reports a case in which he infected a young girl by dusting some iodoform over an abraded surface on her forearm, using a brush, which he had used two days previously on a patient suffering from soft chancre. Clearly, iodoform did not destroy this virus. Instruments used in treating specific diseases should not be used in treating the healthy, if the skin or mucous membrane be abraded.

Herodotus, 484 B. C., says that in Egypt there was a particular physician for each disease. "The art of medicine is thus divided amongst them; each physician applies himself to one disease only and not more. All places abound in physicians; some physicians are for the eyes, others for the head, others for the teeth, others for the parts about the belly, and others for internal diseases." His is now repeating itself.

Dr. Henry A. Martin, of Boston, died Dec. 7th, aged sixty years. He is best known for his labors in connection with the introduction of bovine vaccination into this country. He was also known for his taste for surgical studies. The use of the solid rubber bandage, and the omission of the tube in tracheotomy were actively supported by him. He was a strong writer, an able speaker, a masterly conversationalist, and an earnest, kindly man.

Dr. William Darling, late professor of Anatomy at the medical department of the University of New York, died Christmas morning, 1884. He was a well-known authority on anatomical subjects. He was in his eighty-second year. It is said that nine hours before his death, while in delirium, he delivered a complete and coherent lecture upon anatomy. His ruling passion was strong in death. He is said to have fallen and then taken cold, and from the effects of these accidents died.

Erichsen says: "The practice of operating in notoriously hopeless cases with a view of giving the patient what is called 'a last chance' is much to be deprecated and should never be followed. It is by operating under

such circumstances, especially in cancerous diseases, that much discredit has resulted to surgery; for in a great number of cases the patient's death has been hastened by the procedure, which instead of giving him a last chance, causes him only to be dispatched sooner than he otherwise would have been."

The Philadelphia correspondent of the *Boston Medical Journal* says: "It is now generally understood that the value of a medical diploma is chiefly of an æsthetic character, for it is not trustworthy evidence of the skill, professional attainments, moral character, or length of preparation of its possessor. He also says that the medical colleges of that city crushed a bill likely to pass the Legislature of Pennsylvania, by which a State Board of Examiners should decide upon those who should practice medicine in that state.

Dr. A. L. Loomis says: "A man can take two or three glasses of stimulants through the day as he may feel the inclination, and he may continue this habit for perhaps 25 years without any evident harm accruing from it; but when this man reaches that period of life when the vital powers are on the decline he suddenly finds himself old before his time, for he has all these years been laying the foundation for chronic endoarteritis. I believe, gentlemen, that 50-per-cent of all diseases arise from the use of alcoholic stimulants."

The Weekly Drug News publishes the views of various eminent chemists in regard to the correct name of the new anæsthetic, introduced as cocaine muriate. The majority favor the term cocaine hydrochloride, but a respectable minority are in favor of calling it cocaine chloride. The *Pharmacopæia* still holds to the name hydrochlorate for compounds of this character, and physicians should be guided in their usage by this standard, which will make such alterations in nomenclature, from time to time, as the progress of chemical science demands. The name muriate is obsolete in science, but it designates the compound beyond possibility of mistake, and so, for practical uses, is a good name.

The *Medical Chronicle* has an opinion of the American Academy of Medicine which reads thus: "Above all else it seems to be a mutual admiration society, composed largely of medical dudes and professional pharisees, who at every annual meeting repeat the

words of the pharisee of Holy Writ: 'Lord, I thank thee that I am not as yonder publican.' Its members include some of the most vain-glorious boasters, others whose professional methods verge on the very edge of quackery and lacks many of the foremost men in the profession." This sounds as if the editor was not a member of the Academy. There are few medical societies who do not include all the classes of men, said to be found in the Academy, as given above.

Editor's Book Table.

Roosa on Diseases of the Ear. Sixth Edition.*

For eleven years this work has been before the profession, during which time five editions have been sold and a considerable portion of a sixth. The author designed it for advanced medical students, for general medical practitioners and for specialists in otology. Hence it appeals to the entire medical profession. Perhaps this is one reason why it has been so popular. In addition it was issued just at the beginning of a fresh interest in the study of these diseases and so was the first American book to take possession of the new field. It is clear that having once got the field the author intends that it shall keep it. With each edition the size of the volume is increased. The old matter that has become obsolete is far less than the new matter added by the combined efforts of all otologists. In some respects the work differs from others. Very largely it is a presentation of the author's views and practice. His experience he says now includes more than twelve thousand cases of disease. With such a mass of material at his disposal it could not be that his work would be other than interesting and profitable.

In discussing the differential diagnosis of chronic non-suppurative inflammation of the middle ear from disease of the labyrinth he says "I believe it is a rule without exception, that when the tuning fork C is heard louder and longer through the bones than through the air, the predominant disease is one of the external or middle ear." Other examination will eliminate the disease of the middle and

external ear, so that the test can be readily made final. Or, studying the disease by the aid of external noises, he formulates the results thus:

Bone conduction better,
Better hearing in a noise,
Disease of middle ear.

Aerial conduction better,
Worse hearing in a noise,
Disease of the acoustic nerve
either primary or secondary.

He believes that there is a large class of persons suffering from impairment of hearing in quiet places, who hear very acutely and with comfort amid a great din or noise. The disease causing impairment of hearing thus relieved is situated in the middle ear. It is usually observed in the chronic non-suppurative form of the disease of the middle ear, but it may also be found in acute or sub acute catarrh of this part as well as in a chronic suppurative process with loss of the whole or a part of the membrana tympani.

The cause of this phenomenon is probably in some change in the articulations of the ossicula auditus.

As to the treatment of non-suppurative inflammation of the middle ear, he thinks the results will ever be slight. It is essentially an incurable affection. In adults it may often be arrested or alleviated, but never cured. As to the effects of climate he says that our knowledge does not permit us to affirm that any special climate is best for non-suppurative inflammation of the middle ear. But it is possible that a climate may yet be found that will so change the conditions of life as to admit of a stoppage of the progress of the disease. The disease is the last link in a long chain of improper conditions, and should never be considered as a primary affection, as an entity to be subjugated or driven out by special means adapted to many cases.

His conclusions he gives thus:

Chronic catarrhal inflammation in young subjects is susceptible of relief and cure in a large proportion of cases.

Chronic catarrhal inflammation in adults is susceptible of relief and alleviation in about twenty per cent. of the cases, of cure in none.

Chronic proliferous inflammation, remains as yet incurable and is not susceptible of alleviation or relief, either in the young or old subject, in more than five per cent. of the cases.

Respecting the so-called dry treatment of suppurative inflammations of the middle ears he says: "In spite of all the claims for the

*A PRACTICAL TREATISE ON THE DISEASES OF THE EAR. By D. B. St. John Roosa, M. D., LL. D. Sixth edition. New York: William Wood & Co., 1885. Cloth, pp. 718. For sale by Phillips and Hunt, Detroit, Mich.

exclusive use of powders in the treatment of the ear and valuable as is their place in our therapeutic resources, I still think that instillation of fluids holds the first rank, and the use of powders is of secondary value."

Respecting operations upon the mastoid in aural diseases he says: "The integument and periosteum of the mastoid process should be freely divided in all cases, when there is great pain, tenderness and swelling in this part.

Such an incision should be also made, whenever severe pain, referred to the middle ear, constantly exists, and which is not even temporarily relieved by the use of leeches, poultices, the warm douche. The bone should be thoroughly examined by the aid of such an incision, whenever we have good reason for suspecting that the bone is diseased or pus retained in this part.

The mastoid process should be perforated after such an incision whenever the bone is found softened, or if a fistulous opening is discovered, this should be enlarged. It should also be perforated when the suppuration of the middle ear involves the mastoid cells or antrum to such an extent, that thorough drainage cannot be secured through the membrana tympani or external auditory canal. To detect disease of the internal ear he gives the following train of symptoms together:

1. Tuning fork C, heard better through the air.
2. Hearing is better in a quiet place.
3. Conversation is heard relatively better than a watch.
4. Noise is annoying to a more marked degree than is usual to people who hear well, or to those who are deaf from disease of the middle ear.
5. Inflation of the middle ear renders the hearing worse.

He still holds that quinine produces congestion of the labyrinth and tympanum and sometimes distinct inflammation and permanent tissue changes. Still we must think that these cases are rare as, during a careful examination of several thousand aural patients, we have never personally found a single case in which there was evidence to show that quinine had produced any ill effect. But a negative does not prove a case, so that this evidence proves nothing, while the positive facts do prove something.

Swanzy's Handbook on the Diseases of the Eye.*

This is an excellent work, and must become popular with such medical students as look to it for help in understanding the diseases of the eye. It is clear and concise, telling sufficient to enable the student to obtain a rational idea of all the common diseases. The chapter on the states of the pupil in health and disease, is worth to any practitioner the price of the book. In other pages of the DETROIT LANCET we have given the principle points of this chapter. Massage, jequirity, and most other recent additions to the treatment of the eye, medical or surgical, have had a proper place assigned them. In his recommendations the author leans towards conservatism, as do most of the English ophthalmologists. Perhaps as good an idea as any of the author's style and mode of thought and practice can be obtained from his views respecting sympathetic ophthalmia. He says the following are his present rules of practice:

1. Although danger to the second eye does not arise until inflammation has been set up in the exciting eye, yet I would perform primary enucleation of the latter, if it had been so injured as to make recovery of sight almost hopeless, and the onset of irido-cyclitis almost certain.
2. I would enucleate in the same case, were irido-cyclitis already set up in the injured eye.
3. I would enucleate in a case of acute irido-cyclitis where a foreign body was believed to be present in the eye, and which could not be safely extracted, even though the vision were fairly good, because we know that here the danger of sympathetic ophthalmitis amounts to almost a certainty.
4. I would enucleate in a case of acute irido-cyclitis, traumatic or idiopathic, where vision was lost, especially if the eye were tender on pressure, for here the eyeball is useless and disfigured, and apt to be a source of danger to its fellow.
5. I would enucleate in a case of phthisis bulbi, even of old standing, where there was shrinking pain on pressure.
6. I would enucleate in a case where the sympathizing eye is already affected, pro-

A HANDBOOK ON THE DISEASES OF THE EYE AND Their Treatment. By Henry R. Swanzy, A. M., M. D. With Illustrations. New York: D. Appleton & Co. 1884. pp. 437. Cloth. For sale by John Macfarlane, Detroit.

vided vision in the exciting eye be lost, and hopes of its recovery but slight, if any; for improvement in the sympathizing eye, or a greater amenability of it to treatment, has frequently been observed after this has been done.

7. I would enucleate in a case of sympathetic irritation, if the sight of the exciting eye were very defective, and the neurosis very persistent.

I would not remove any injured eye, unless it contain a foreign body which I could not remove, if its sight were fairly good, and as yet no sign of inflammation in it. Inflammation may not come on, and the eye may possibly be saved.

I would not enucleate the exciting eye if sympathetic ophthalmitis had already appeared, should the vision of the exciting eye be fairly good. For it often occurs that the process in the sympathizing eye is not arrested by the proceeding, and that where the latter is not undertaken, the exciting eye turns out in the end to be the organ with the better vision.

Speaking of the suppuration of the corneal wound after cataract operations, he thinks well of the suggestion of Homer and Abadie. These surgeons, at the first onset of the inflammation, open up the wound from end to end with a spatula, evacuate the aqueous humor and wash out the anterior chamber with injections of a saturated solution of boracic acid, or a five-per-cent. solution of salicylic acid, while the conjunctival sac is irrigated with a similar solution, and these measures repeated at intervals of eight to twelve hours.

It cannot be expected that all experts will accept all the author's views, but they will be interested in them. It may fairly be said that they represent the best modern thought on these matters.

Juler's Handbook of Ophthalmic Science and Practice.*

This work has received a most flattering reception from English ophthalmologists. Its presentation by Lea to the American profession is timely. Briefly, it presents to the student concise descriptions and typical

illustrations of all important eye affections. The descriptions and illustrations are so placed in juxtaposition as to be grasped at a glance. The illustrations are numerous, including twenty-seven full-paged lithographic plates, and one hundred and twenty-five wood-cuts. As the work contains but four hundred and forty-six pages, it will be seen that the illustrations form a very prominent feature of the book. Beyond a doubt it is the best illustrated handbook of ophthalmic science that has ever appeared. Then, which is still better, these illustrations are nearly all original. We have examined this entire work with great care. As a whole it fairly represents the commonly accepted views of the more advanced ophthalmologists. Debatable questions are mostly omitted. This course was demanded by the character of the work, and especially fits the work for a textbook to medical students. If it be possible for a student to learn ophthalmology from a book, this must be that book. But as this is impossible, the work will make more available the large eye clinics to be found in connection with most medical schools.

We can most heartily commend this book to all medical students, medical practitioners, and even specialists. The latter will be interested even if no new thought is presented to them. As to the style of the author, it is remarkably attractive for so condensed a work. We quote an extract from his conclusions drawn from an extended comparative study of sulphate of atropine and hydrobromate of homatropine:

A single instillation of either the one-fortieth or the one-twentieth of a grain of hydrobromate of homatropine is insufficient to paralyze accommodation, and hence is of no value in properly estimating refractive error.

Complete paralysis of the ciliary muscle can be obtained by a single instillation of either the one-fortieth of a grain, or the one-twentieth of a grain of sulphate of atropine.

A single instillation of the one-twentieth of a grain of hydrobromate of homatropine is capable of producing full dilatation of the pupil; whilst it is impossible to produce maximum dilatation by a single instillation of the one-fortieth of a grain of the same drug.

Maximum dilatation of the pupil is produced by a single instillation of either the one-fortieth or the one twentieth of a grain of sulphate of atropine.

The utmost action of a single instillation of the one-fortieth of a grain of hydro-

*A HANDBOOK OF OPHTHALMIC SCIENCE AND PRACTICE. By Henry F. Juler, F. R. C. S. With one hundred and twenty-five illustrations. Philadelphia: Henry C. Lea's Son & Co., 1884; pp. 467. For sale by Phillips & Hunt, Detroit, Mich. Price: cloth, \$4.50; leather, \$5.00.

bromate of homatropine upon the ciliary muscle, is attained later and lost sooner than the full paralysis occasioned by a single instillation of an equivalent amount of sulphate of atropine.

The utmost action of a single instillation of the one-twentieth of a grain of the hydrobromate of homatropine upon the ciliary muscle is attained sooner and more quickly lost than the full paralysis occasioned by a single instillation of an equivalent amount of sulphate of atropine.

The mydriasis of a single instillation of either the one-fortieth or the one-twentieth of a grain of hydrobromate of homatropine is not so quickly produced, and is of shorter duration than that of a single instillation of either the one-fortieth or the one-twentieth of a grain of the sulphate of atropia.

Complete ciliary paralysis can be obtained by a single instillation of the one-sixtieth of a grain of the hydrobromate of homatropine at the time of the utmost action of a single instillation of the one-twentieth of a grain of the hydrobromate of homatropine, thus allowing ametropia to be accurately determined.

A single instillation of either the one-fortieth or the one-twentieth of a grain of hydrobromate of homatropine, by reason of its transient effect on the iris and ciliary muscle, is valuable when we desire accurate ophthalmoscopic examination in cases dependent upon their use.

The conjunctival irritation of hydrobromate of homatropine may be avoided by the use of an absolutely neutral salt.

Single instillations of the amounts given, of either of the drugs are perfectly free from injurious effects."

Graham on Practical Massage.*

This work is based upon the results of more than fourteen hundred cases, and an exhaustive study of all the written contributions of other students in the same field. He shows that massage has been employed for thousands of years. Among the ancient Greeks and Romans it was employed as a luxury as well as for medical purposes. The various procedures included under the term massage he describes under four heads:

Friction, percussion, pressure and movement. Malaxation, manipulation, deep rubbing, kneading, or massage properly so called, is to be considered as a combination of the last two. Each of these may be gentle, moderate, or vigorous, according to the requirements of the case and the physical qualities of the operators. The following directions he gives as general rules for operating:

1. All of the single or combined procedures should be begun moderately, gradually increased in force and frequency to their fullest extent, and should end gradually as begun.

2. The greatest extent of surface of the fingers and hands of the operator consistent with ease and efficacy of movement should be adapted to the surface worked upon, in order that no time be lost, by working with the ends of the fingers, or one portion of the hands when all the rest might be occupied.

3. If too near the patient, the manipulator will be cramped in his movements; if too far away, they will be indefinite, superficial, and lacking in energy.

4. The patient should be placed in an easy and comfortable position, with joints midway between flexion and extension, in a well ventilated room, at a temperature of from seventy to seventy-five degrees F. Any sensation of tickling will soon be overcome by the effects of the massage.

5. What constitutes the dose of massage is to be determined by the force and frequency of the manipulations, and the length of time during which they are employed, considered with regard to their effect upon the patient.

6. The direction of the procedures should almost invariably be from the extremities to the trunk, from the insertion to the origin of the muscles, in the direction of the returning currents of the circulation. Friction may be spoken of as circular and rectilinear; the latter may be vertical or parallel to the long axis of the limb; or horizontal, transverse, or at right angles to the long axis.

Full details are given of all the procedures called for in massage of different portions of the body, under different conditions.

The effects of these procedures are fully explained. Then the specific affections in which it has been serviceable. We were especially attracted to the value it was shown to possess in the diseases of the eyes. Certainly the clinical results attained were in the highest degree desirable. He quotes approvingly Pagenstecher's experience with massage. By this it appears that he found this treatment

*A PRACTICAL TREATISE ON MASSAGE, By Douglas Graham, M. D. New York: William Wood & Co. 1874. pp. 284. Cloth. For sale by John Macfarlane. Price, \$2.50.

valuable in chronic inflammation of the anterior segment of the eye; contra-indicated when it is found to cause excessive injection, and especially if there be photophobia and lachrymation and iritis. In some cases it acted as a depletive, lessening the tension of the eye; in others as a stimulant, aiding the formation of new vessels, and thus proving beneficial when nutrition and absorption were torpid. The massage was applied once or twice a day, from two to four minutes, according to effects. Chronic affections of the cornea, sclera and ciliary body were most satisfactorily treated by this method. He often uses yellow oxide of mercury ointment as an adjuvant to the massage. We have no space farther to dwell upon the teachings of this book. Certainly, it should be carefully studied by all physicians and surgeons. It opens up a field for observation that has been neglected far more than it should have been. Of course the great difficulty is in the procuring the properly trained persons to do the needful manipulating. These, as it seems, are more rare than good nurses. But if only the profession desires them, they can and will be trained. Only then, when a large number of cases are subjected to this treatment, shall we learn the full value of massage. In nervous diseases of certain kinds it has already done what all other means have failed to do. Under the name of the Weir Mitchell treatment it has come to be a standard treatment in a formerly hopeless nerve affection.

Hamilton On Fractures and Dislocations. Second Edition.*

Twenty-five years have passed since the issue of the first edition. Then there was no other treatise on this subject in the English language. Hence it at once became the standard of the medical profession respecting this subject. Now other works exist upon the same subject, but it is safe to say that no one or even all of them has taken the place of this one. To the present edition the author has made large additions, including all which he deemed of value contributed by other observers in this field. Especially has he drawn upon the French edition of his work, published last year in

France, and edited by Dr. A. Poincot. Of course his own extensive experience has afforded him much new material.

One great charm of this work is the evident pains the author has taken to eliminate all false facts, so-called, and unreliable statements. He has sifted evidence with the most faithful regard to simple truth. Especially important is this feature of a work which proposes to be the foundation upon which malpractice suits may be adjusted. Most of these suits have their origin in some broken or dislocated bone. This work has been regarded for years as one of the soundest authorities on these questions. Of course every surgeon, every medical student and every general practitioner will at once place this work in their libraries, and the new facts in their minds, so that they can be readily recalled, as emergencies shall demand.

The publishers have issued it in a substantial and elegant manner.

Garratt on Myths in Medicine and Old-Time Doctors.*

The author tells us that his book has three principal subjects.

1. Under what circumstances were nervous affections first described, and what were supposed to be their cause, nature and treatment?

2. When did the general revival of rational medical research commence, which resulted in the present radical reformation, excellence and unity of the medical profession?

3. Does the often repeated epithet, "old school," apply now to the regular medical profession of the present time or to the strictly "dogmatic schools" and sects of the past and present?

This historical sketch shows that the homeopaths are the real "old school doctors" of the present day because they retain the absurd assumptions of alchemy. Homeopathy is an old conglomeration of sophistry and mere dogma, and still lingers because it has not been fully and fairly understood. The "system" of homeopathy, like the system of mormonism, has a mysterious fascination; both have many proselyters who are industrious and successful. It is a mysterious

*A PRACTICAL TREATISE ON FRACTURES AND Dislocations. By Frank Hastings Hamilton, A. B., M. D., LL. D. Seventh American edition, revised and improved. Philadelphia: Henry C. Lea's Son & Co., 1884; pp. 1095; sheep. For sale by Phillips & Hunt, Detroit.

*MYTHS IN MEDICINE AND OLD-TIME DOCTORS.—By Alfred. C. Garratt, M. D., New York. G. P. Putnam's Sons. 1884. Cloth, pp. 242. Price, \$1.50. For sale by John Macfarlane, Detroit.

excrecence, hydatid, or monstrosity of a dogma that ought to have died as soon as it was born.

Altogether the book is worthy of careful reading by both profession and laity. In our own opinion education will not reach the root of the trouble. The fact is many people are born to dogmas and absurdities, as are many insane persons to their delusions. Like as in the insane, some admit of treatment, we grant, but after all a remnant will remain incorrigible to the end. The history of the past shows that as soon as one dogma is disposed of another comes to light as the god to be worshipped by these ill-constituted minds.

Bodenhamer's Treatise on Hæmorrhoidal Disease.*

This volume is the first devoted solely to the consideration of this disease issued from an American press. In France, De Montegre published a large treatise more than fifty years ago. While numerous books have not been devoted to its consideration, it must not be supposed that it has been neglected. Myriads of papers have been written upon it. A vast amount of good work has been devoted to its study. Yet all admit that it is involved in much obscurity. Absurd notions still hold the minds of the laity and much of the profession. The cause of the trouble is by no means clear. This is to be inferred from the fact that different pathologists fail to agree upon any one view. Naturally, from this uncertain pathology, most treatment is devoted to dealing with the mere effects of the malady. The author claims that this disease has never been studied as it should be, and hence its treatment is necessarily empirical. The author has endeavored to do his share by bringing together the errors of ancient and modern times, and the meaningless verbiage which invests so much of discussion. Hence a full history is given in detail of the various steps by which our present knowledge has been reached. Thus it is an encyclopædia upon the subject. In addition to this it gives the author's own views and plans of treatment. The various modes of treatment adopted by others, regular and irregular, are also fully stated. From this character of the

*A TREATISE ON THE HÆMORRHOIDAL DISEASE—By William Bodenhamer, A. M., M. D. Illustrated by two chromo-lithographs and thirty one wood cuts. New York: 1884; pp. 307. Cloth, \$3.00. For sale by John Macfarlane, Detroit.

work, it does not constitute very entertaining reading, but that it contains the facts is beyond a doubt. That the subject calls for fuller investigation is beyond question. We trust that this book will stimulate investigation, and so lead to a more scientific knowledge of this disease.

New York State Board of Health's Fourth Annual Report.*

This forms a volume of about 450 pages. It is, in fact, a report or combination of reports upon investigations of causes of public ill-health in various sections of the state. Diphtheria, malarial fever, typhoid fever, cattle plague, rubeola, pond nuisances, factory nuisances, imperfect drainage, milk dilution, Neufchatel cheese manufacture, glucose manufacture, are some of the sources of localized public health investigated. Some of the special reports are of great interest. Any person desiring to study any of these questions, will here find some valuable suggestions. In a former issue we have called attention to Dr. F. C. Curtis' investigation of the epidemic of typhoid fever at Port Jervis. We were much interested in this study as would all medical men and other intelligent persons be who would read it.

Concerning the milk supply of New York City, it appears that about 500,000 quarts of milk are used daily. So thoroughly is this inspected, that only about one can in forty is found to be watered by the milk inspectors. Formerly one-fourth of water was added to each can.

Holden's Anatomy.†

This work has now reached its fifth edition. Teachers of anatomy and medical students have joined with physicians generally, in regarding this as the very best of anatomical text-books, in so far as general outlines are concerned. Large numbers of the profession are already familiar with it. To others it will suffice to say that this work directs attention to the prominent facts of anatomy, and teaches the groundwork of the science.

*FOURTH ANNUAL REPORT OF THE NEW YORK State Board of Health. Albany. 1884. Paper, pp. 441.

†HOLDEN'S ANATOMY, A MANUAL OF DISSECTION of the Human Body. By Luther Holden. Edited by John Langton. With over 200 illustrations. Philadelphia: P. Blakiston, Son & Co. 1884. Pp. 886. Price, cloth, \$5.00; sheep, \$6.00. For sale by John Macfarlane, Detroit.

It traces the connection and points out the relations of parts without perplexing the reader with minute descriptions. All portions of the human body are described in a concise and accurate manner. Directions are given for the best modes of dissecting the body. In fact, the several portions of the body are examined in the order in which it is most convenient to dissect them. One great charm which this work has ever possessed is, that it records the observations of an enthusiastic dissector. The publishers have issued it in an elegant manner, so that it is pleasant to look at and easy to read.

**Erichsen's Science and Art of Surgery,
Eighth Edition.***

After the profession has placed its approval upon a work to the extent of purchasing seven editions, it does not need to be introduced. It appears that the author has deemed it best to call to his aid in the preparation of this edition numerous co-workers. Thus, Mr. Marcus Beck has re-written the parts relating to surgical pathology, and much relating to clinical and operative surgery. Dr. William A. Meredith has revised the part relating to the surgical treatment of some uterine and ovarian diseases. Others have assisted in other parts of the work. Many new illustrations have been added. Wisely the author has omitted the chapter on diseases of the eyes. This is better studied in works devoted exclusively to this subject. Of course all the new operations are carefully described and illustrated. The importance of surgical cleanliness is everywhere emphasized. Simultaneous with the appearance of this edition, a translation is being made into Italian and into Spanish. Thus this favorite text book on surgery holds its own in spite of numerous rivals at the end of thirty years. The only fault we have to find with it is its increased size. But to many in the profession this will be a positive recommendation. It is a grand book, worthy of the art in whose interests it is written. The publishers have issued it in their best style. The second volume is announced to appear early in January, 1885.

*THE SCIENCE AND ART OF SURGERY.—A Treatise on Surgical Injuries, Diseases and Operations. By John Erichsen, F. R. S., LL. D., F. R. C. S. Eighth edition. Revised and edited by Marcus Beck, F. R. C. S. Vol. I. Philadelphia: Henry C. Lea's Son & Co., 1884; pp. 1,124, sheep. For sale by Phillips & Hunt, Detroit, Mich.

**Lefferts' Pharmacopœia for the Treatment
of Naso-Pharyngeal Diseases.***

The author tells us that this little book was prepared for the use of his students, whom he is unable to sufficiently instruct in the course of lectures at his disposal. Certainly, to one who desires a collection of the best remedies and preparations for use in treating naso-laryngeal diseases, this work will prove of great value. As all physicians are called upon to treat such cases, the call for this work must be large. He gives several of the best forms of air compressing apparatus, with the modes of using them.

Ultzman on Pyuria.†

This is really a treatise upon gonorrhœa and its complications. The relatively few cases in which pus is found in the urine from other causes than urethritis and its complications, are simply treated as incidentals. The subject is treated from a scientific standpoint, and while it does not present any facts or views which are especially new, it does present the whole subject in an interesting and suggestive light.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Obstetrics.

VINEGAR IN POST-PARTUM HÆMORRHAGE.—Dr. Grigg (*British Medical Journal*) recommends the use of vinegar in cases of *post-partum* hæmorrhage. A wine-glassful given after the placenta is expelled causes rapid contraction of the uterus, and speedy arrest of the hæmorrhage. It should be given without water, and a smaller dose repeated in fifteen minutes if the effect be not well-marked. He regards it as better and safer than ergot.

*A PHARMACOPŒIA FOR THE TREATMENT OF DISEASES OF THE LARYNX, PHARYNX AND NASAL PASSAGES, etc. By Dr. G. M. Lefferts, A. M., M.D. Second edition. New York: G. P. Putnam's Sons. 1883. Cloth, pp. 100. For sale by John Macfarlane, Detroit.

†PYURIA, OR PUS IN THE URINE AND ITS TREATMENT. By Dr. Robert Ultzman. New York: D. Appleton & Co. 1884. Cloth, pp. 98. For sale by John Macfarlane, Detroit.

Diseases of Children.

SCARLET FEVER IN CHILD-BED.—Dr. Théophilus Parvin, of Philadelphia, in the July number of the *American Journal of the Medical Sciences*, records a case of scarlatina occurring in a woman soon after labor. He believes that the puerpural state increases the susceptibility to the germs of this disease.

Otology.

RESORCIN IN OTORRHEA AND WHOOPING COUGH.—In the August issue of the *Therapeutic Gazette* Dr. Tangeman reports great success in the use of resorcin in the treatment of chronic suppurative inflammation of the middle ear. Sometimes he uses the pure powder, and sometimes an ointment of twenty-five grains to the ounce. We tried the same remedy, but got such unsatisfactory results that we gave it up entirely.

In the same journal Dr. Mon Carvo gives his experience in the treatment of whooping-cough with a spray of resorcin. This experience has been very gratifying to him.

A PECULIAR CAUSE OF TINNITUS AURIUM.—Dr. Atwood (*Weekly Med. Review*, Aug. 2, 1884) reports the following personal observation. He is perfectly well, and has perfect hearing. Yet for the past twelve years the tinnitus in his ears has been almost constant. He has discovered the cause and is able to prevent it at will. He is an inveterate user of tobacco, and has determined that the tinnitus depends upon his use of tobacco. Smoking produces a greater effect than chewing. If he stops the use of tobacco the noise in his ears stops, but it recurs when he again uses the tobacco. Although the noise is very loud at times he prefers its annoyance to the loss of pleasure from the use of the tobacco.

TINNITUS AURIUM TREATED BY THE USE OF NITRITE OF AMYL.—Dr. A. Alt (*Weekly Med. Review*) reports a hundred cases of tinnitus aurium treated by nitrite of amyl. Many of the cases were at the same time treated for otitis catarrhalis chronica. But of the one hundred, thirty-five cases were not at all affected, in ten cases there was a momentary improvement; in twenty-five cases there was temporary improvement; in sixteen cases there was considerable lasting improvement, and fourteen cases were appar-

ently cured. From his experience he is unable to describe the nature of those cases of tinnitus likely to be benefited by the use of the nitrite of amyl. In the discussion which followed the reading of Alt's paper, most observers reported that they had failed to get any benefit from treating cases of tinnitus by nitrite of amyl. The writer has extensively employed this remedy, but without any good effect, which might be accounted for by the other treatment adopted. Certainly in cases of chronic non-suppurative inflammation of the middle ear, the usual treatment might fairly be credited with the relief to the ringing. In the writer's experience this has been a frequent result.

THE TREATMENT OF ONE EAR INFLUENCING THE OTHER.—Dr. A. Eitelberg (*Archiv. Otology*, Vol. XII, p. 277, etc.), presents a large number of observations bearing upon the changes induced in one ear by the treatment of the other. His results are thus:

1. The treatment of the one ear causes a distinct improvement in the hearing of the other, in a large proportion of cases; it rarely causes a diminution of hearing.
2. The greatest improvement in hearing on the side that had not been treated, was noted in cases of unilateral, acute, or chronic suppurative inflammation of the tympanum. It was additionally discovered that the hearing power of that side that was not treated, presuming of course, that the disease had not already invaded the ear, could be restored to the normal amount before the morbid process upon the affected side had run its course.
3. When both ears are affected the treatment of either one exclusively often produces an improvement in the other, and this not merely so far as concerns the hearing, but as concerns any subjective noises that may have been present.
4. In most of the cases which were under my observation, the ear that had not been treated did not generally return at once to a normal condition, but only after a moderate lapse of time, while on the contrary.
5. In other cases, the hearing, which had at first been gradually restored in the one ear by treatment of the other, gradually decreased in the course of observation.

It is probable that these effects are produced by means of the trigeminus. Urbantschitsch has shown that irritation of the fibres of this nerve on one side diminishes the power of sound perception on both sides.

Ophthalmology.

HOW DOES ALUM OPERATE TO PERFORATE THE CORNEA WHEN APPLIED TO ITS SURFACE IN PHLYCTENULAR KERATITIS?—We had always supposed that all agents like alum were positively contra-indicated in all phlyctenular affections. But it seems that some oculists employ it and report bad results, especially in hastening the perforation of the cornea. In the *Practitioner* Dr. Tweedy gives experience in the use of an alum lotion combined with belladonna. Observing this untoward result, he discontinued its use. Lately he observed its use with the same results in the practice of other ophthalmic surgeons. He then recalled the fact that histologists use alum to dissolve the cement of the cornea in making preparation of the corneal fibrillæ. Thus in life the alum dissolves the softened tissues of an ulcer and gradually dissolves the cement through the entire thickness of the cornea.

WHEN DOES ESERINE LESSEN INTRA-OCULAR PRESSURE?—Dr. Tweedy answers this query in the *Practitioner* thus:

1. When the anterior chamber is shallow, provided the iris be not actually or firmly adherent to the periphery of the cornea. So long as the iris is free to move, contraction of the pupil pulling upon the breadth of the iris flattens the arch of the iris and tends to draw it away from the cornea, thereby widening the corneo-iridian angle, and allowing of the escape of fluids through the spaces of Fontana.

2. In some cases of aquo-capsulitis, by pulling upon the delicate fibres at the angle of the anterior chamber, and tearing some of the adhesions which cover and close up the orifices. As in the case of atropine, however, the action of eserine in this disorder is slightly uncertain.

3. In some cases of inflammation or ulceration of the cornea, especially when the ulceration is at the margin of the cornea.

WHEN DOES ESERINE INCREASE INTRA-OCULAR PRESSURE?—1. Slightly and temporarily in the healthy eye, by determining blood to the ciliary body and iris, and thereby increasing their bulk.

2. In iritis by increasing the quantity of the blood within the eye-ball, enlarging the bulk of the iris and ciliary body, stimulating the inflammatory processes, and favoring the

effusion of lymph and other inflammatory products.

3. In aquo-capsulitis for similar reasons.

TOBACCO AMBLYOPIA.—Dr. Chas. Shears (*Brit. Med. Jour.*, June 21, '84) presents the results of the study of forty cases of tobacco amblyopia presenting themselves at the eye hospital, with which the writer is connected. In all the cases he found the following conditions: Rapid and usually great failure of sight, not remedied by spectacles and not due to any obvious external changes; where no ophthalmoscopic changes were found, or at the most, slight pallor or redness of the disc; where the patient was an excessive smoker.

Of the forty cases fourteen recovered completely, fourteen improved greatly, and in twelve no improvement was noted.

He thus concludes: Atrophy of the optic nerves is very rarely met with as the result of excessive smoking. Tobacco is the essential agent in producing the failure of sight. Great moderation in smoking, and especially the employment of mild forms of tobacco, is all that is necessary to ensure recovery.

TOBACCO AMBLYOPIA IN WOMEN.—Dr. Geo. Barry (*Oph. Review*, Vol. III, p. 101) reports several cases of this nature, and from them concludes:

1. Alcohol has no direct influence in the causation of amblyopia.

2. Smoking at a time when the counter stimulus of food is absent, more commonly tends to produce it than smoking at another time.

3. The outbreak is most likely to occur if along with the want of food, the system be, for the time being, lowered by nervous exhaustion or imperfect nutrition.

4. The disease is essentially functional.

A NEW CAUSE OF MYDRIASIS.—Ralpoldi (*Archiv. Oph.*) reports a case in which there was marked dilation of the pupil after the probing of the naso-lachrymal canal. It occurred in a girl of nineteen, and gradually disappeared when the probing was discontinued, but it at once returned when the probing was renewed. Since this observation he has observed the same phenomenon in nine cases. In two of these the pupil was very much dilated and immovable; in the others it reacted, but was wider than that of the other eye. In one case not only was the pupil dilated, but the patient, a young woman, had an epileptiform attack. The phenomenon is

ascribed to irritation of branches of the sympathetic nerve by the probe. Dr. Dantone confirms these observations from his own experience. We had seen the same so many times that it had not seemed to us unusual.

THE CHANGES IN THE EYE IN BRIGHT'S DISEASE.—Dr. G. S. Dennissenko (*Med. Westnik. Archiv. Ophthalm.*), after the most careful examination of every portion of the eye in Bright's disease, found no evidence of inflammation of any of the membranes. He found the cornea, sclera, conjunctiva, iris, optic nerve, retina, choroid, and ciliary body more or less infiltrated with albuminous fluid and œdematous, the interstices of the tissues being greatly distended or torn. The albuminous exudation may coagulate, and even fatty degeneration may set in. Only a few wandering cells could be found in the œdematous tissue. The visual disturbances are partly due to the œdema of the cornea, partly of the retina, though they may also be merely secondary phenomena, the result of ruptures, occlusion of the vessels by an exudation, passive hyperæmia, extravasations, destruction of the rods and cones, etc. Sometimes thin, coagulated deposits of albumin are found upon the lens. Detachment of the retina, when it occurs, is due to the exudation, while the dark spots in the choroid result from the mechanical destruction of the pigment epithelium. The cause for this, as well as the exudation in other parts of the body, must be sought for in the nervous system. The escape of the albuminous liquid into the tissues produces compression of the blood-vessels, and to it may be ascribed the hypertrophy of the heart and the extravasations of blood. All the ocular symptoms, except those due to destructive changes, may disappear when the patient is put upon nourishing diet and the general health improved. The author proposes to drop the term "retinitis albuminurica," and substitute "œdematosa Brightica." The following symptoms may lead to a diagnosis: Absence of hyperæmia, or even the presence of anæmia, small, white streaks at the sclero-corneal margin, more clearly visible with a lens, discoloration of the iris, and sluggish reaction of the pupil, dullness of the iris and slight bulging, grayish appearance of the retina and albuminous deposits in it.

THE FUNDUS OCULI IN INSANE PERSONS.—Dr. T. H. Bickerton (*The Brain*, July, 1884), from a very extensive study of the fundus oculi in the insane, concludes:

1. In insanity proper (including all forms of other than general paralysis) changes in the fundus oculi are found in a small minority of cases; but when allowance is made for changes depending upon associated constitutional conditions, errors of refraction and the number of cases in which a connection between the mental (cerebral) state, and the accompanying change in the fundus oculi, can be so much as suspected, is very small.

2. In insanity proper no connection can be traced between the condition of the fundus oculi and the patient's mental state.

3. In the majority of the cases of "general paralysis of the insane," the fundus oculi presents a perfectly healthy appearance.

4. In a minority of cases clear and precise lesions are found.

5. These lesions fall into two main classes, the one tending in the direction of slight neuritis, the other in that of atrophy.

6. In the former classes the affection declares itself as a hyperæmia of the discs, the edges being softened and indistinct, so that in some cases they can be traced with difficulty, or not at all; and these conditions tend—if the patients live long enough—to be replaced by atrophy, so that at length complete disorganization of the nerve may take place. The changes are essentially chronic in their course.

7. Though atrophy of the optic nerves may thus succeed to a slight chronic interstitial neuritis, it is not unfrequently primary at the disc; the atrophy may be complete, the patient becoming quite blind.

8. The pathological basis underlying the appearance of slight neuritis, may be broadly characterized as a tendency to overgrowth in the connective elements of the nerve; the tuberculæ not only getting greatly hypertrophied, but the neurologia corpuscles also becoming very large and numerous; those parts thus grow at the expense of the nervous elements which subsequently atrophy.

9. In the cases of primary atrophy, the pathological appearances eventually reached, though somewhat similar, may possibly take place in the reverse order at the disc; the nerve fibres being the first to dwindle, and the fibrous elements—trabeculæ, etc.,—subsequently taking on an increased growth.

10. In a considerable proportion of cases in which atrophy of the optic discs is met with, spinal symptoms are prominent in the disease, these symptoms pointing in the direction of posterior or lateral sclerosis of the

cord; but this connection is by no means invariable.

WHERE ARE THE NERVE CENTERS FOR THE MUSCLES OF THE EYE?—This question is of much importance in many relations. Thus the symptoms observed in cases of tabes dorsalis involve both internal as well as external ocular muscles.

Althaus (*Sclerosis of the Spinal Cord*, p. 167) gives the researches of Henson and Noelker thus: they found in the dog a muscular area in the posterior portion of the floor of the third ventricle and the aqueduct of Sylvius, which has definite relations to all the movements of the eyes. Stimulation of that area which is almost in front, showed it to be connected with the ciliary muscle for accommodation; the one next behind with the iris; that portion which is between the third ventricle and the aqueduct with the rectus internus; while still further behind were found the centres for the superior rectus, the levator palpebræ, the rectus inferior; and most backward that for the obliquus inferior. That this arrangement exists in man is probable. Kahler and Pick have found in two cases in which the function of iris and accommodation had been normal, that the anterior portion of the area just described was healthy; while in one case in which there had been paralysis of the rectus terminus, the median part of the area was destroyed, and in another where the rectus superior, the obliquus inferior, and the levator palpebræ have been paralyzed, the posterior portion of the area was found sclerosed. This also accounts for the occipital pain so often observed in cases of eye strain.

Therapeutics.

HYOSCINE.—Ladenburg several years ago pointed out the fact that henbane contains, in addition to hyoscyamine, a second alkaloid, to which he gave the name of hyoscine. Until recently, however, this second alkaloid has been assumed to be of secondary importance, and no careful study has been made of its physiological action as compared with that of hyoscyamine. Until recently, also, most of the hyoscyamine of commerce has been a semi-fluid substance admitted to be very impure, and known to contain much hyoscine. This article, however, was pronounced by the physicians who employed it in the treatment of insane patients a calmative and hypnotic remedy of great value. The crystallized hyoscyamine, however, which is now manufac-

tured, does not prove equally efficacious, and it is evident that this alkaloid is not, in fact, the true active principle of henbane.

Prof. H. C. Wood (*Therapeutic Gazette*, Jan., 1885) has recently made a careful study of the physiological, toxic, and therapeutic action of hyoscine, and finds that it is this alkaloid rather than hyoscyamine which produces the characteristic effects of the drug. The results of physiological experiments on animals are thus summed up by the author: 1. "Hyoscine acts upon mammals chiefly as a spinal depressant. 2. It is a centric respiratory depressant, causing death by asphyxia. 3. It has very little effect on the circulation, what influence it exerts being in the normal animal set aside by the asphyxia it produces. 4. It does not paralyze the pneumogastriacs. 5. In enormous doses it paralyzes the vasomotor system. 6. On the heart itself its action is very feebly depressant."

In experiments upon the human subject the following effects were observed:

1st. In nearly every case the pulse rate was reduced, particularly when it was abnormally rapid. Thus the pulse rate fell from 78 to 60; from 84 to 60; from 84 to 70; from 150 (in hysteria) to 72; from 108 to 86, etc. In one instance the pulse rose from 76 to 102, falling again gradually to 80.

2d. The respirations in about one-half the cases were not affected; in the remainder of the cases they were diminished by from four to seven per minute.

3d. The tendency to sleep was very marked: usually the sleep during the afternoon (the drug having been administered in the middle of the day) was light and doze-like, but in one or two instances it was heavy from the beginning, and it was always profound the following night.

4th. There was often slight nausea, but in no case vomiting. Dryness of the throat and mouth, giddiness, flushed face, and some wandering of mind during the condition of dozing seem to have been nearly universal.

5. No action upon any of the secretions was noticed, and in no case were there any unpleasant after effects.

6. The hypodermic injections gave no more pain than do those of morphine, the drug appearing to be free from irritant properties. The dose in these experiments ranged from 1-360 to 1-120 grain, the salt employed being the hydrobromate, and the drug being in every case given by hypodermic injection.

The toxic action of the drug was illustrated during this series of experiments in

the experience of one of the assistants in the laboratory, who accidentally swallowed a small quantity of a strong solution. The first effect observed was dizziness, accompanied by dimness of vision and a staggering gait, from want of co-ordination of muscular action. After supper, an hour later, the patient became very stupid and sleepy, with a sense as of a weight hanging on his eyelids. The pulse was 50, slightly interrupted. There was a sense of swimming in the head, with an irresistible desire to doze, but the sleep was light and dreamful; a little later there was a distinct sense of suffocation, with pain in the forehead. The narrative is continued in the words of the patient himself, as follows:

"My head now commenced to ache as though there were a tight constricting band around my forehead. Breathing, though not difficult, did not seem to relieve a sense of suffocation which now came over me, and every few minutes I was obliged to take a long breath for relief. I now began to wonder whether the stupor might not become too profound, so I attempted to arouse myself from the trance-like condition that appeared to be stealing over me, but the efforts were only partially successful. The clock now commenced to strike eight, and I attempted to count the strokes, but arrived at eight only to hear the clock go on striking several times more, at which I was somewhat surprised. The desire now took possession of me to go to bed and sleep off the effects of the drug. One of the gentlemen of the house just then came in to inquire my condition, but I could not realize his presence in the room. It seemed as if I were dreaming, and that my answers to his questions were part of the dream. I now staggered into the next room, partially undressed, and got into bed, when I immediately fell asleep. I was awakened some time afterwards, with no difficulty, by an inquiry after my health, but the presence seemed a dream, and I again fell into a profound slumber which lasted for an hour or more.

I now became oppressed with a feeling of general uneasiness and unrest, and I tumbled in bed from side to side, vainly trying to move the load from my chest which seemed crushing me, and I spent the remainder of the night in this way, with occasional periods of complete insensibility in sleep. There has been no after effect other than a slight headache and general indisposition to exertion."

Prof. Wood concludes: "The peculiar therapeutic value which the physiological study of the drug leads us to look for, arises from the union of decided hypnotic powers with a spinal sedative influence and a very feeble depressant action on the circulation. The calmative influence of conium in certain cases of mania is well known, but such action appears to be indirect, and due to the motor depressant influence of the drug. From hyoscine we have reason to expect both a direct and an indirect beneficial action."

Prof. Endlessen was the first person to employ medicinally a pure crystalline salt of hyoscine; he gave it in six cases of whooping cough, with advantage in three cases; in six cases of asthma, always with advantage; and in two cases of severe enteralgia, with relief to the pain.

Prof. Wood gives details of nine cases in which the hydro bromate of hyoscine was employed as a hypnotic and calmative agent, generally in cases of maniacal excitement, in which the ordinary sedatives—chloral, potassium bromide, morphine, etc.—had been employed without effect.

In nearly every case the results were gratifying, the patient becoming speedily quieted and falling into a profound sleep. The medicine was sometimes administered by the mouth and sometimes by hypodermic injection; the dose was from $\frac{1}{100}$ to $\frac{1}{80}$ grain. In less severe cases the remedy may be given in doses of $\frac{1}{400}$ to $\frac{1}{100}$ grain. The clinical results obtained in cases other than those of maniacal excitement seem to indicate that the remedy has little value for the relief of pain, but much for the removal of spasm.

There seems to be no doubt that hyoscine is the true active principle of henbane, and now that the crystalized salts can be procured this remedy can be prescribed with much greater confidence of obtaining definite results than has been the case heretofore.

A CONTRIBUTION TO THE THERAPEUTICS OF KAIRINE.—Dr. J. K. Crook (*Medical News*) sums up a study of this new drug as follows:

1. It is a decided febrifuge, rapid, though somewhat fugacious, in its action.
2. It diminishes the frequency of the heart's action to some extent, though the pulse-rate does not fall *pari passu* with the temperature.
3. The symptoms of collapse—cyanosis, cold extremities, etc.—may be entirely or in a large degree avoided, by close attention and the proper use of stimulants.

4. It is a tolerably constant diaphoretic.

5. Its action in intermittents, though not fully tested, warrants the belief that it possesses valuable anti-periadic properties, and as such should be carefully investigated.

6. Though kairin itself may not be found to possess all the properties of the alkaloid quinine, enough has been learned of its action to justify the hope that a perfect substitute may yet be found, and inspire us with renewed confidence in the resources of organic chemistry.

Sellés (*Revista Med. de Sevilla; Lond. Med. Rec.*) reports several cases of severe dyspnœa occurring in old persons that he successfully treated with quebracho (aspidos perma). From his report it would seem that this drug was the most valuable in this condition.

Schilling (*Revue Med., Lond. Med. Record*) states that the ergot of rye prevents the noises in the ears caused by large doses of salicylate of soda and quinine. The aqueous extract of ergot may be given in solution with the salicylate of soda and the powdered drug with the quinine.

SANTONINE AS A REMEDY FOR GLEET.—Dr. Anderson (*Lond. Lancet; Lond. Med. Record*) states that in treating a patient for lumbrici, he not only killed the worms, but cured a gleet that had existed for some time in spite of various remedies. The formula recommended is: Santonine, milk sugar, of each five grains, to be taken twice a day fasting, in milk.

Practice of Medicine.

A STUDY OF THE NUTRITIVE VALUE OF BRANNY FOODS.—At a meeting of the College of Physicians of Philadelphia (*Medical News*), Drs. N. A. Randolph and A. E. Raussel presented a paper on the value of branny foods, with the following deductions:

I. The carbohydrates of bran are digested by man to a slight degree.

II. The nutritive salts of the wheat grain are contained chiefly in the bran, and, therefore, when bread is eaten to the exclusion of other foods, the kinds of bread which contain these elements are the more valuable. When, however, as is usually the case, bread is used as an adjunct to other foods which contain the inorganic nutritive elements, a white bread offers, weight for weight, more available food than does one containing bran.

III. That the major portion of the gluten of wheat exists in the central four-fifths of

the grain; that the so-called gluten cells, or the cells of the fourth bran layer, are little, if at all, affected by passage through the digestive tract of the healthy adult.

IV. That in ordinary mixed diet the retention of bran in flour is false economy, as its presence so quickens peristaltic action as to prevent the complete digestion and absorption, not only of the proteids present in the branny food, but also of other food-stuffs ingested at the same time; and,

V. That any process whereby only the three cortical protective layers are removed, is the best and cheapest.

NOTES OF PRACTICE. BY DR. C. C. P. CLARK, OSWEGO, N. Y. (*N. Y. Med. Jour.*, June 7th, 1884). TREATMENT OF VARICOCELE.—“Books and teachers of surgery constantly, or customarily, warn us not to mistake a varicocele for a hernia, and aggravate it by the employment of a truss. Now, the fact is, that the best of all treatment for this wearing and wearying affection is a weakish truss. It has never failed in my hands, and I have used it scores of times, not only entirely or greatly to relieve the sufferer, but, by continued application, to effect a permanent cure, save in very aggravated cases. The theory of its operation is that, pressing upon the spermatic veins, the pad takes the place of the deficient valves, supporting the superincumbent columns of blood which their defection has let weigh wearily down upon the sensitive parts below. This particular of practice is the more important because the ailment is one that makes a man “feel bad all over,” and argues to the mind of the patient, and not seldom of his surgeons, a variety of diseases that have no existence. When the bars of honor in our profession are still farther let down, and the “go-as-you-please” principle becomes our law, I propose to advertise a list of the cases of Bright’s disease, heart disease, dyspepsia, hypochondriasis—in fact, almost everything but retroflexion of the womb and fissure of its os—that I have cured by the gentle pressure of a truss on the spermatic veins where they pass over the pubic bone. I was my own first case.”

NITRITE OF AMYL IN MIGRAINE.—Dr. Bianchi (*Revue de Therap., Med. News*) has caused the instantaneous disappearance of this troublesome affection by making the patient inhale three drops of nitrite of amyl placed on a handkerchief. The subject was a woman who suffered from this neurosis at

each menstrual epoch. It is well known that nitrite of amyl acts by paralyzing the muscular fibres of the small arteries, and that its action is specially exerted on the cerebral vessels, and that local congestion is the consequence of this paralysis.

PULMONARY COMPLICATION IN ERYSIPELAS.—Deschamps (*Gaz. Hebdom. de Méd. et de Chir., Lond. Med. Record*), says erysipelas may spread along the lining membrane of the bronchial tubes and of the pulmonary alveoli, and this is called by him broncho-pulmonary erysipelas. In other cases erysipelas may, like other infectious fevers, cause a pulmonary inflammation, which is constitutional, and not local in its origin. The two forms can be distinguished by their mode of onset.

ON THE HEART IN PNEUMONIA.—De Giovanni (*Gaz. Med. Ital. Prov. Venete; Lond. Med. Record*), in an examination of thirty cases of pneumonia, found an increase in the cardiac area in all. He claims that there is always an increase in volume, and that the nervous system is the chief but not the only cause of this condition. This affects the circulation and through it the temperature of the body, now checking and now encouraging the radiation of heat. General prostration and profuse sweating favor dilatation of the heart. If there is early and persistent dilatation we may know the case will not progress favorably, and can manage our treatment accordingly.

CHLORAL HYDRATE AS VESICANT.—Dr. A. M. Fauntleroy (*Southern Clinic*) recommends powdered chloral hydrate sprinkled in adhesive plaster and melted by a gentle heat—not more than sufficient to cause the plaster to adhere to the flesh. It is applied while warm to the part where the blister is wanted; within a few minutes a gentle heat is felt, increasing in intensity for a short time, then gradually easing off, and at the end of ten minutes the part is free from pain, and effectually blistered. Thus, within about 10 minutes, the work of an old-fashioned blister is accomplished, with many advantages over the latter, viz.: 1. Rapidity of action. 2. Ease of application. 3. Non-occurrence of strangury. 4. The blister requires no dressing. The plaster is simply allowed to remain until it loosens and comes off itself. The blistered surface is, in the meanwhile, healing kindly.

BOROGLYCERIDE IN THE TREATMENT OF SUPPURATIVE INFLAMMATION OF THE MIDDLE EAR.—Dr. A. M. Rosebrugh, of Toronto,

at the last meeting of the Ontario Medical Association, read a paper on this preparation. It is made by heating together, in an open capsule, two ounces of boracic acid and three of glycerine, the acid being added gradually. This is heated until the mass is reduced to two-thirds the original weight. The product may be readily dissolved in glycerine, and in treatment a 50-per-cent. solution is first used, to be gradually reduced in strength until the disease is cured.

Dr. Chas. S. Turnbull, of Philadelphia, also recommends the preparation very highly for contagious ophthalmia. He uses the 50-per-cent. solution.

Surgery.

HYPOGASTRIC SECTION VERSUS PERINEAL SECTION IN CYSTOTOMY.—Pilcher, in *Annals of Anatomy*, gives the views of Villeneuve on this subject thus. He concludes:

1. The hypogastric section, which until today has been employed as an exceptional method, would appear worthy of becoming the usual, though not the exclusive method of performing cystotomy.

2. It should be practiced with the help of the recent improvements suggested in the method of operating; distension of the rectum by the rubber ball, injection of the bladder, pushing back of the perineal cul-de-sac, double syphon drainage-tubes, antiseptic precautions and dressings.

3. Suture of the bladder should at present be rejected, though it remains as an ideal step to be sought after which, if it becomes realized so that immediate union can be secured, will place the superiority of the hypogastric section beyond dispute.

4. Hypogastric section remains, as in the past, a method of necessity in cases of voluminous or encysted stones, of intolerant bladder, and of impassible or strictured urethra or vagina.

5. Everything favors the presumption that it will become the preferred method in cases of old men and adults in those less aggravated cases, where lithotripsy is found not to be applicable, and which have hitherto been treated by different methods of perineal lithotripsy.

PEYRAUD'S METHOD OF ADMINISTERING CHLOROFORM.—M. Peyraud (*Jour. de Méd. Bordeaux*) uses only a double thickness of fine cambric with which to give chloroform. This he lays over the mouth and nose. Then

he places one drop of chloroform on the bridge between the tip of the nose and mouth. He adds one drop after each inspiration. After some minutes he increases the dose to two drops. Thus he gets insensibility in from seven to ten minutes without any of the usual preliminary stages of agitation and hyperæsthesia, and without any irregularity of respiration or of the pulse. When the anæsthesia has been obtained in this manner he withholds the chloroform for a minute or two, and then resumes its administration in the average dose of three drops per minute. The patients affirm that given in this manner the inhalation of chloroform is not disagreeable. As there is so small a proportion of chloroform in the inspired air, the vapor of one drop to thirty cubic inches of air, that there can be little disturbance of the blood functions or irritation of the respiratory mucous membrane.

ON CYSTOTOMY, BY A MODIFIED LATERAL METHOD IN CERTAIN CASES OF ENLARGED PROSTATE.—Mr. Reginald Harrison, F. R. S. C., Surgeon of the Liverpool Royal Infirmary, (*British Medical Journal*) writes:

"Within recent years, I have had cases where it has been found expedient to make an opening into the bladder from the perinæum, in preference to other measures, the usual means of relieving obstructed micturition, or the consequences arising therefrom, having failed or proving insufficient.

I may premise by stating that, apart from those cases of obstruction complicated with circum-urethral abscess, no such proceeding has been undertaken on the sole ground that catheterism was impossible, though some difficulty connected with the performance of the operation has, with other circumstances, usually been present.

The selection of a method for opening the bladder should have reference only to the object to be obtained, or the contingencies that may arise. If, for instance, we desire merely to introduce the finger into it, as a preliminary to extracting a small stone, the median operation answers perfectly; whilst, if a larger stone, or an unknown quantity of anything, has got to be dealt with, the lateral incision will, as a rule, be preferable.

It has been advanced by those who favor the median incision, which is practically an urethrotomy, that it is both simple and safe; its admitted disadvantage lies in the comparatively small space it provides for manipulating and extracting; whilst, on the other hand,

the lateral incision, though affording more room, is considered to be attended with an increased risk and a greater degree of difficulty, so far as its performance is concerned. The median operation need not necessarily involve anything more than the opening of the membranous urethra. The completed lateral operation further includes the division of structures constituting the neck of the bladder; and it is to this part of the proceeding that any increased risk or difficulty is to be attached.

A little reflection shows that it is possible to closely assimilate the lateral with the median operation, that is to say, to dispense with the incision, not to the staff, but along the staff, should it be found, on exploration with the finger, that the additional room which the latter part provides is necessary for the object in view. It need hardly be said that this modification of the lateral method, where it is found, on digital exploration, to be feasible, frees the operator from executing the only portion of the operation to which an increased risk is attached; whilst, on the other hand, he has the consciousness that, should it turn out to be necessary, he can, by the completion of the deep incision along the staff, avail himself of all the advantages which are conceded by surgeons to the lateral method of opening the bladder." Mr Harrison illustrates his method by the description of a case.

A NEW SURGICAL NEEDLE AND THREAD.—Dr. John W. Cousins (*Med. News; Brit. Med. Jour.*), has introduced a new needle and thread combined. A piece of wire is drawn out to the required thickness, with the exception of an inch or two at the end. This end piece is sharpened and forms the needle. It has many advantages over the steel needle. It does not require to be threaded, thereby saving much valuable time; there is no kinking or twisting, as there often is with the ordinary needle at the eye. It can only be used a few times and is always new, sharp, and ready.

THE USES OF THE LIGATURE.—Dr. W. H. Van Buren (*Principles of Surgery*, p. 88), gives these thus:

The ligature is to be applied:

1. To the end of every recognized artery divided in amputating a limb, and also to those which give blood after the operation is completed and the tourniquet removed.
2. To both ends of every artery partially

or completely divided, which can be made to bleed in a wound, *e. g.*, in any ordinary surgical wound, as, for example, that made in removing a tumor, where every vessel that emits a jet is to be caught and tied; at once when the tumor is large or vascular; after its removal if small.

3. To both ends of every artery large enough to have a name, whether partially or completely divided, or whether bleeding or not.

4. To the continuity of an unwounded artery, when it is desired to arrest its stream; as for the cure of aneurism; for cutting off the arterial supply in a growing tumor; for the removal of diminishing hæmorrhage during the removal of a tumor, in which case the operation for removal must be done immediately after tying the artery and before the collateral circulation has become established.

5. For lessening the efflux of blood to inflamed parts.

THE TREATMENT OF SERPENT BITES.—Dr. W. H. Van Buren (*Principles of Surgery*, p. 313), thus sums up the indications for the treatment of wounds from serpent bites:

They consist essentially in recognizing and resisting the tendencies to death—serpent poison kills in three ways. First, by the brain by direct sedation, for which the remedies are constriction of the limb by ligation, scarification and suction, alcohol and external heat; second, by disorganization of the blood—as manifested in its fluidity—a condition which will pass away in a limited time if the heart can be kept beating and the warmth of the body preserved. Third, by subsequent local sloughing and suppuration, producing exhaustion. These are to be met by suitable incisions, stimulating dressings, and supporting general treatment.

CHOLECYSTOTOMY; WITH A REPORT OF TWO NEW CASES, A TABLE OF ALL THE HITHERTO REPORTED CASES, AND REMARKS.—In *The American Journal of the Medical Sciences* for October, 1884, Drs. J. H. Musser and W. W. Keen publish a carefully prepared and instructive article on cholecystotomy, in which they relate two new cases, with a table of all the hitherto reported cases, thirty-five in number.

The first case was that of a man, æt. 32, who had had attacks of biliary colic for five years, followed by jaundice, until he was reduced in strength, and had chills and fever threatening life. Dr Keen attempted chole-

cystotomy, the incision being made over a region of dullness believed to be the gall-bladder. This dullness was found to be due to an inflammatory mass, which glued together the gall-bladder, colon and intestine. No stone could be detected. The wound was closed, and recovery ultimately followed a course of Hathorn water at Saratoga.

The second case was also that of a man, æt. 31, with acute gastro-intestinal catarrh, followed by jaundice, enlarged gall-bladder, and symptoms of internal suppuration. The enlargement of the gall-bladder was demonstrated by the hypodermic needle, but the fluid was not bile. Dr. Keen performed cholecystotomy, using a large hollow-handled spatula to drain off the twenty ounces of fluid contained in the gall-bladder. The gall-bladder was found to be seven inches in depth, but neither by finger nor probe could any gall-stone or the orifice of the duct be found. A biliary fistula was established, and was discharged through it the next day. The patient died a week later of exhaustion. The post mortem examination revealed inflammatory closure of the cystic and common ducts at the mouth of the gall-bladder and at the duodenum.

Dr. Musser, in his medical comments, analyzes at length the causes, symptoms, and diagnosis of biliary obstruction, under the heads of jaundice, tumor, pain, and suppuration, especially in relation to gall-stones and other foreign bodies and diseases of the ducts. He points out the means by which a just conclusion may be reached, and that cholecystotomy should be resorted to early in the case rather than wait till the blood is disorganized and the liver softened and made functionally useless. Especially is this true in view of the low mortality of the operation, there having been (excluding Gross' incidental case) only nine deaths in thirty-four operations, and of the fact that Mr. Tait has done thirteen operations, by far a larger number than any other operator, all of which have been successful.

In his surgical comments, Dr. Keen discusses the surgical means of diagnosis by aspiration, with or without probing through canula, and by acupuncture, both of which, when properly done, he commends. He also strongly urges an early laparotomy, followed at once by cholecystotomy, if found advisable, and condemns the attempt to provoke or wait for adhesions. Indeed, upon this disregard of adhesions hinges the whole of our modern

progress in abdominal surgery. He points out that to Bobbs, of Indiana, and to Sims, both American surgeons, is due the credit of first performing and practically perfecting the operation. He advises the formation of a biliary fistula, rather than sewing up the gall-bladder, and disapproves, as a rule, of removal of the gall-bladder, as adding a new and usually a needless danger.

TRAUMATIC CEPHALHYDROCELE.—Compound fracture of the skull, especially of its base, with resulting escape of the cerebro-spinal fluid is, as every one knows, a common accident; but the occurrence of subfascial accumulation of this fluid, in connection with and consequent upon simple fracture of the vault, is of such rarity that two cases recorded by Dr. P. S. Conner, of Cincinnati, in the July number of the *American Journal of Medical Sciences*, will be studied with interest. So far as he has been able to ascertain, there have been reported but 19 cases of subfascial accumulation of the cerebro-spinal fluid after simple vault fracture, and three others where there had been originally a communicating wound of the scalp which had closed.

As far as has yet been observed, excluding those cases which were primarily compound, this traumatic cephalhydrocele is met with only in young subjects. Explanation of this fact is probably to be found, at least in part, in the great elasticity of the skull in infancy and early childhood, permitting of marked depression and fissuring of the vault without that associated wound of the scalp which would be likely to occur were ossification complete; and in part also, in the much closer connection of the meninges and skull in children than in youth and adults.

The decided gravity of these cases is apparent from the statistics. Of the eighteen cases of simple fracture in which the result is known, nine (50 per-cent.) died—eight of the meningo-encephalitis and one of erysipelas and meningitis; and of the three in which the fracture was originally compound, one died ($33\frac{1}{3}$ per-cent.) of cerebral abscess. Even the supposed recoveries may be regarded with some suspicion, because of too early report.

Dr. Connor draws the following general conclusions:—

1. Simple fracture of the vault of the skull may give rise to a collection under the scalp of the cerebro-spinal fluid; coming, it may be, only from an opened ventricular cavity.

2. Such traumatic cephalhydrocele may be

developed quickly, or only after the lapse of a number of days or even weeks.

3. The condition is one that has thus far been noticed only in young subjects.

4. The accident is quite likely to prove fatal from lepto-meningitis or meningo-encephalitis.

5. Operative interference should be restricted to the removal by aspiration of a limited amount of fluid; and such aspiration should be made only when severe pressure symptoms have manifested themselves.

6. A similar fluid accumulation may occur after closure of the external wound of a compound vault-fracture or of a trephining.

A CASE OF RESECTION OF THE PYLORUS FOR CARCINOMA.—In the October issue of *The American Journal of the Medical Sciences* Dr. Randolph Wilson, of Baltimore, reports with full details an unsuccessful case of pylorotomy performed with antiseptic precautions upon a woman aged 42, suffering from carcinoma, who, in her own words, was "dying every day." She survived the operation two hours.

DUPUYTREN'S CONTRACTION OF THE FINGERS.—Mr. Noble Smith reported seventy cases of this affection (*Louisville Med. News*) to the Royal Medical and Chirurgical Society at a late meeting. The disease was found mostly in old people, the average age being 73; twelve were over 80. The general health was good. Inquiry did not confirm the theory that gout and rheumatism are the chief causes of the complaint. As to treatment, the author recommends that as few incisions as possible be made in operating on these hands. Section of the palmaris longus in the early stage is also recommended.

Pathology.

CONVERSION OF MALIGNANT TUMORS INTO INNOCENT GROWTHS.—Dr. Nussbaum, of Munich (*Wien. Med. Zeit., Lond. Med. Record*), in a clinical lecture expressed a belief that he had discovered a procedure for the positive cure of cancer, by restraining the proliferation of the tissue elements of the disease. This he accomplishes by the use of the thermocautery, with which he makes a deep channel around the tumor thereby cutting off the greater supply of blood and other fluids from the surrounding tissues. This method has met with great success in his hands.

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Original Communications.

A Manufacturer of Men; Artificial Fecundation *

TRANSLATED FROM THE FRENCH BY F. B. FLORENTINE, M. D., SAGINAW, MICH.

M. GEORGES BARRAL appears as the introducer of a species of literature of possibly a doubtful moral tendency. The genus is not a new one, and we can even name two of its principal characters. The more especial one consists of a bold challenge of the rights of physiology in the organization of society, and in the conduct of individuals; the second in having direct affiliations with that school of nature and "*documents humains*" which, at the centenary celebration in honor of Corneille, M. Gaston Boisdier deplored in language whose eloquence carried with it the force of conviction. That regard for physiological law should involve freedom to indulge all natural appetites, both good taste and a sense of natural shame forbid us to admit. We recoil from the spectacle presented to us of unbridled vice, exhibited in the nakedness of its moral and physical degradation, painted in language that ignores refinements of expression, but rather delights in dramatic surprises, which, while they shock us, keep alive our curiosity. Such a literature, instead of discouraging vice, excites in the innocent evil imagination, while it precipitates the fall of those who are depraved.

But physiology itself is never obscene; it is in fact one of the lights of organized society, and supplies rules for conduct of the highest value, and having the binding force of law. It is on this ground that M. Barral has placed himself; only he has put himself in a position where it is most difficult to present to the public the fruits of the tree of knowledge, without being suspected of meddling with forbidden things. He deals in fact with a question which concerns the sexual functions.

After having edited the "Breviaire de l'Amour experimental" of J. Gugot, and having written the "Missel de l'amour sentimental"—works with which we have already entertained our readers—he now offers us a volume entitled, *Faiseur d'hommes*, the manufacturer of men, and this is to be followed by two others, the first entitled the *Son of the Manufacturer of Men*; in the second our author, in coöperation with Yveling Ramband, proposes to study in the life of the grandson the subject of conception in a psychological point of view.

We will here attempt to give a summary of the first of these volumes.

Every one knows the brilliant results in artificial fecundation achieved in the latter half of the eighteenth century, the development that it has attained in our days, and the part especially which it plays in the industries of pisciculture and ortreiculture.

To the eyes of the learned there opened up a large perspective in the possible application of these methods to the improvement of our own race. If the pollen of flowers transported by the wind to great distances can sow life; if, in the case of the animal, the ovule may be impregnated by contact with the fecundating substance without the active co-operation of the parents, why may not woman be artificially impregnated? The attempt was made with success, about the year 1838 by Dr. Girault, and since that date artificial fecundation in cases of sterility has been practiced by men of the highest reputation in the medical profession. We must premise, however, certain conditions are morally indispensable for the legitimate performance of the operation.

There would seem to be no reason why the magistrate should raise any objection, and yet while he cannot point out any formal infraction of any existing statute, he speaks of it in terms of reprobation, and refuses to recognize it as a legitimate operation medical practice. At least we infer this from a case which came up in court at Bordeaux in 1883, where a physician sued for the recovery of his fee for an operation of this kind. The court held that since the opera-

* Le Faiseur d'hommes; La fécondation artificielle de la femme. By A. Dechambre (Gaz. Hebdomadaire de médecine et de chirurgie).

tion did not remove the cause of sterility in such a manner as to confer upon the pair the normal power of procreation, but produced fecundation by an artificial method that is reproved by natural laws, its employment did not constitute a lawful cause of obligation, and consequently it ruled against the plaintiff.

This decision, or rather the doctrine on which it is founded, having been submitted to the consideration of the Legal Society of Medicine, according to M. Leblond's report, was unanimously disapproved. The civil law requires the court to possess itself of all the facts and circumstances of the case, and render judgment accordingly. The judge in the present instance might have refused the claim of the physician on the ground that the operation performed endangered the order of society or the morals of the community, but to attempt to limit medical practice, and to declare that an operation which is asserted to contravene "natural laws" cannot constitute an obligation, is a perfectly arbitrary proceeding.

It is this thesis of the legitimacy of the operation of artificial fecundation that the romance of "*Le faiseur d'hommes*" is intended to defend. I do not now remember what philosopher or statesman it was who said, "There is but one way of hearing certain truths, as there is but one way of begetting children." In a sense, the second proposition is true, physiologically, but MM. Ram Band and Laforet insist that practically there are more ways than one to impregnate a human female.

The marriage of the Count Rudolphe and the Countess of Aldenberg, about 1867 (so the romance goes) proved to be an unfruitful one. The countess suffered extreme grief in consequence, and became subject to nervous crises, which recurring from time to time threatened to take away her reason or her life. Thus returning with her husband from the court of Bavière, she pulled into her carriage a cherub snatched from the arms of an old musician who was walking back and forth with the child upon the quay. A little further on she saw a poor mother following the bier of her only son who had recently died upon the field of honor; she was all at once thrown into an agony of weeping, ending as suddenly in uncontrollable laughter. All this is sufficiently characteristic. The husband understands it; he scolds a little, but the consciousness of his own responsibility for their common misfortune renders him indulgent, and

in heart he adores all the more his wife that he is less capable of giving her the material proof.

They finally reach the castle where they shortly receive a visit from an old friend of the count, Dr. Krauss. He is a great savant, a very out-spoken man, and an enthusiastic advocate of artificial fecundation. He explains his views to the count, and urges his consent to an operation, stating that the safety of his wife depends upon it. The count receives the doctor's remarks and advice with docility, and goes straight to his wife and informs her of the matter. He is met with indignation, cries, revolt, and violent refusal. What shall be done? The old physician of the place, Dr. Schoffein, is a rusty old foggy, rebellious against progress, and besides he scents a rival in his fellow physician already so well installed at the castle, and appearing to have the rights of possession.

Mme. Olympe Guntzer, sister of the countess, and a practical woman, prefers, and proposes, as a remedy, a nice and beautiful lover, but her husband, a councillor of the old regime, thunders in the name of the law cries of adultery.

The director of the priory of Aldenberg, Rev. Petrus Streg, more sedate and sensible, contents himself with religious scruples.

The countess decides to consult secretly the reverend prior, and to abide by his decision. He asked, and was given time for reflection. She at last received an answer from him. It is an epistle, "in the name of the Father, and of the Son, and of the Holy Ghost." The epistle is long, but not very conclusive, and concludes in about the same way as that of St. Paul to the Corinthians when the question came up regarding marriage.

The prior speaks as a priest, but has the rebellions of a philosopher. He asks himself if the church, in drawing the "imprescriptible rules" of marriage, could have foreseen the extraordinary case in question, and after due considerations upon the infirmities of human nature, he produces, without citing its author, a thought of Pascal, "the proud I will abase the humble I will exalt," etc., and finally leaves it for her to decide according to her conscience. This settled the matter for a woman so violently enamored of maternity. The countess consented to the experiment. The operation was rapidly performed under rigid conditions of purity.

The experiment succeeded, and a son was

born, whose name, however, we did not learn, but scoffing tongues at the court of Bavière called him "the progeny of the syringe." The romance finishes unexpectedly with a pistol shot. Dr. Knauss has shot himself. He was in love with the mother and the child, and had to be separated from both, and he preferred death.

In passing from the romance to the realities of medical practice, the question of the legitimacy of artificial fecundation is notably simplified. The romance, speaking to all the world, is obliged to speak to all consciences, to address itself to all kinds of scruples, and to weigh all objections. For the physician it is only needful to be well penetrated with a sense of the obligations which have created his special profession. Religious considerations, for example, do not concern him, because religion is not the same in different countries, while the duties of the physician are everywhere the same.

There is not a word in our ethical code which condemns even indirectly the operation in question, and we may be sure that no clause will hereafter be introduced, because it is not for law to settle questions of conscience.

The duty of the physician, although not bound by religious or juridical prescriptions, is not, therefore, above the sphere of moral considerations. The physician certainly is not at liberty to undertake anything whatsoever in opposition to the principles inscribed in his conscience, but he is bound more than other men not to allow his private scruples to operate to the prejudice of his patient, after voluntarily assuming the responsibility of caring for their interests.

In the first place, the physician does not have before him simply a case of sterility. He may be indifferent to the frustration of the ends of marriage as related to the community, but he cannot overlook the bodily and mental sufferings of his patients, culminating in strange nervous perturbations—sufferings of the mind which pervert the character and often end in insanity. Is it possible that the physician, convinced of the uselessness of all medication, shall not find himself driven to the consideration of a sure remedy, which by satisfying the longing of nature, may repair all the mischief?

M. de Sinéty ranks the operation in question as one of the simplest in the world in the series of means employed in the treatment of sterility. Considering it as a sort of *ultima ratio*, "whenever all other means have

failed," says he, "we are justified in practicing artificial fecundation, if desired by the wife and husband," and he gives, without ceremony, a description of his mode of operating, as well as a description of his syringe. Among the simple theorists, M. Courty shows himself a little more guarded, but only in form, or for the form, for he says to his fellow physicians, who are inclined to try artificial fecundation, "the best procedure in order to preserve to the semen its vitality, and to the spermatozoa their proper movements," etc.

Higard and Kaltenbuch, in a new edition of their gynæcology, just translated by Dr. Bard, assigns a whole chapter to this subject. Evidently these respectable physicians did not suppose that the operation could be seriously condemned by any practitioner of medicine.

Does the question end here?

No. I have already spoken of conjugal secrets, and mutual consent, but this is not enough. The essential condition for the legitimate operation must be that the element should be that of the husband, after the demonstration of the existence and activity of the spermatozoa. From this it follows that the operation can be permitted only in cases where sterility results from some malformation of the organs, or some pathological condition of the sexual organs of the female.

I abide by these considerations. I hold not only the physician's right but the physician's duty to be in these cases to offer the intervention of his science, and I agree also with Higard and Kaltenbuch that if the physician experience a certain repugnance against such an operation, "*il est des raisons qui doivent faire oublier ce côté sombre du tableau*" (there are reasons which ought to make us forget this darker side of the picture); in fine I advise, as did the prior of Aldenberg, with reasons more positive, and with a conviction of liberty more firmly fixed.

Dec. 15, 1884.

A Talk About SICKHEADACHE.

BY T. CURTIS SMITH, M. D., AURORA, IND.

THIS is a homely title, but one that will not be misunderstood. It is an opprobrium in our profession so far as its complete cure is concerned.

It is frequently met with, and I will venture many of your professional readers will have

keen memories of various and frequent attacks of this enemy of human happiness.

The fact that it is one of the most difficult diseases to handle and requires more fine discrimination in its management than many maladies far more dangerous in their character, is my chief excuse for offering anything on this subject.

But some one is ready to ask, Do you consider it a disease in the proper sense of that word? No, not in the sense in which we speak of typhoid fever or variola. Yet its symptomatic revelations are always the sequence of certain morbid conditions in the nervous system or chylopoëtic viscera. I believe it is generally of neurotic origin, and that the digestive derangements are secondary.

But whatever the primary origin of the storm of pain and general suffering may be, one thing is very sure, *i. e.*, both the nervous system and the digestive apparatus become involved in every severe attack as soon as it is fairly on.

If the prescriber for sickheadache is careless concerning the precedent and present condition of his patient he may stand assured that he will be very likely to fail in efforts at relief. But by a careful clinical study of each case he may soon learn to so far discriminate his subject as to afford great relief in a large majority of them. In every case the remote and immediate causes ought to be sought out, and our battalions should be wielded against them with as much precision as it is possible to command.

Many of the subjects of this disease will be ready enough to second our efforts at relief during the attacks. But when ease from the suffering comes, then comes with it a full degree of carelessness of habits, modes of living, needless exposures and excesses that will soon cause the storm cloud to darken the sky of health. Then there must be a repetition of all the suffering of a fresh attack. If our patients would help us to rid them of the causes of the attacks with scrupulous care, many of them could be effectually relieved. One of the first things needed is to get, if possible, full control of the patient as to habits, diet, hours of business, kinds of employment, etc.

Preventive treatment, skillfully directed, will, if persevered in, obviate many a fierce attack, or break the force of the assault. The more frequently these are prevented or reduced in force, the greater the probability of final triumph over the affection.

Let me present a typical case of the nervous

type of this symptomatic disease: L. D. is a man of 32. He has always been a very temperate man, steadily industrious, a hard worker, appetite generally good, sleeps well, quite regular; but is subject to attacks of migraine every few days. His employment is mostly out of doors and not very heavy. Often, however, he is kept indoors by his business for several days together. He is generally apprized twelve or twenty-four hours before hand, when a storm is likely to set in. He recognizes it in the symptoms of keen hunger at or near bed time, when he knows in fact that he has eaten enough for that night. Or more frequently he will wake in the night or rise in the morning with a sensation of fulness in the stomach, and an unpleasant taste or stickiness in the mouth, the saliva being slimy or thick. He will also note a feeling of general malaise and some heaviness of head, perhaps some considerable pain may also be already present, or very decided vertigo is noted.

In many of these cases there will also be a feeling of tenderness or soreness about the muscles of the neck posteriorly, and especially of those running down to the scapula and shoulders. There will often, also, be present a peculiar symptom affecting the levator and sphincter ani muscles, which, to me, seems to indicate the involvement of the spinal nerve centres in this affection. The symptom to which I refer is the tonic contraction of the sphincter and levator ani muscles. These will be drawn up tight and kept there until the attack has spent its force unless the will power is brought to bear on them to loosen their tension. Sometimes this is a very annoying symptom, and often produces the costive condition that is present in such attacks by virtue of their power in closing and elevating the rectum.

In addition to the foregoing symptoms, the subject will have difficulty to restrain his temper, or from speaking sharply to his best friends on very slight provocation, or none at all; noises not commonly noticed will be very chafing, and light that before was comfortably endured or enjoyed, now becomes, all at once, painful to tolerate; thus photophobia will be well marked, often painfully present. Many times the feet and hands are decidedly cold, the skin is paler than normal, the facies show a feeling of quiet, irritable, depressed discomfort. If the weather is cold it seems colder than it really is. If hot it seems abnormally oppressive. These are most of the premonitory symptoms, and L. D. has about

all of them preceding every assault. If now he can eat a very light breakfast, or almost none, and not be subject to any considerable strain during the day, he may miss the more severe suffering. But if any severe tax is brought on him, he soon notes a peculiar sensation of his nerves, a tight strung-up tension that is soon succeeded by a storm of severe pain in the head that by or before night will send him to bed. The keen suffering from pain, the distressing depression, intense photophobia, the vehement throbs caused by slight noises, or by very insignificant movements, or by the utterance of a few words even, cannot be portrayed in language. It is the essence of discomfort to an intense degree.

This suffering will continue for hours or all night in most cases. In some the next morning finds the symptoms abated to a considerable degree, but the pain goes on for a day or two more with much accompanying depression. With I. D. a single night generally ends the storm for that time, especially if he can get a few hours to sleep. If not, it continues until or through the second night.

Now, how can such a case be relieved, or better, the attack thwarted? To accomplish the latter, let the subject be sure not to eat anything before going to bed; to eat a very light breakfast, or none at all, to avoid long continued or severe mental or physical effort; to avoid all manner of excitement, and as far as possible be moderate in all things until the danger of an attack has passed over.

If the stomach is sour, from fermenting food, an antacid of considerable power should be promptly taken before breakfast, or whenever such acidity is noted or suspected. If there is constipation, an enema of simple water with a little salt in it—an ounce to a pint—should be given as soon as possible. This alone often gives a complete immunity for the time, from a threatened attack. With many persons a cup of hot coffee or tea serves the purpose as a preventive nicely; but persons who are at all intemperate in the use of these stimulants, are not likely to get any special benefit from them, and are often made worse by them. A dose of quinine will sometimes avail much in the same line.

But suppose the attack has fully developed what then will relieve it? It will be remembered that the particular case above described is one of a nervous type, in which the pain is most intolerably intense, and the subject is compelled to remain quiet until easy. There is no nausea or vomiting. In this case and

in this class of cases I have found the following prescription to be very effectual, viz:

R Fl. ext. aconite root.
Fl. ext. gelsemium, ℞ ℥ iv.
Fl. ext. belladonna, ℥ i.
Magendie's sol. morphine sulph. ℥ iii.
Tr. opii camph. ʒ i.
Water and syrup, q. s.

M. Sig. Take this dose every 30 to 60 minutes until easy, or its specific effects are distinctly noted.

If the paregoric in this mixture is especially distasteful, it may be omitted or Spts. Vini Gallici substituted. Some cases are bettered by the use of Ammonia with, or better, following each dose of this preparation. In many such subjects as above described, there will be very prompt relief, while in others, several doses will be demanded. In a few instances I have noted that the peculiar numbing effects of the aconite will come on and alarm the patient, and not relieve him to any considerable extent. I always deem it best to advise the patient of these peculiar, tingling, numbing symptoms, and then they will not be alarmed when they come. Indeed, in most cases, the remedy must be pushed to the point of producing some of these specific effects before relief is fully secured. They should never be given *on a full or a sour stomach*, for they will not only not relieve, but cause unwonted depression when so administered. Some cases, when fully understood, will bear double the dose or more at once, and be fully relieved in an hour or two, on a single dose thus increased. I have a standing patient of the exact type above described, to whom I habitually give the following, viz:

R Fl. ext. aconite root,
Fl. ext. gelsemium,
Magendie's sol. morph. ℞ ℥ x,
Fl. ext. belladonna ℥ iii,
Tr. opii. camph. ʒ ij,
Water and syrup q. s.

M. Sig. Take at one dose. Repeat in four hours if needed.

This nearly always gives prompt relief, but it causes such a numbness of the lips, hands, and lower extremities as would alarm a patient unused to it or not expecting it. Such a dose ought never to be given to any case until we have learned by steady approaches with smaller doses just about how much the particular patient in hand will require, and will safely stand without danger.

In this same class of cases, a good round stimulant, as of whisky or brandy, with a mild anodyne will act splendidly. But these stimulants are dangerous remedies to give

habitually to many of these cases, for the dose must be resorted to very often and the habit will be sure to grow. "The last state of that" patient will be "worse than the first." Of course, after the use of any relieving agents, the patient should be kept quiet if possible; must not read or write, or talk much, must go to sleep if possible, and then relief will soon come, in most instances. I have seen it afforded by the above remedies, although active business, or hard labor, or horseback riding was continued right along, but it is not so complete nor so sure to come.

Some, no doubt, are now asking: "Why not use bromide of potassium in such cases?" Well, for the reason that this agent depresses; has no direct anodyne effects, and in my experience causes an increase of the trouble in this particular class of subjects. In another class it is just the remedy needed, and will exactly fit in its place.

There are a few of this particular nervous class of sick-headache patients where the pain is incited by ocular strain. They are far in the minority however. But with them no amount of preventive or relieving treatment will avail anything until the eyes are accommodated with a proper pair of glasses, or the patient stops reading, writing, or all fine work. S. Wier Mitchell very clearly described these cases and the treatment needed for their relief some years ago.

At some other time I may describe two other classes of these cases of sick-headache. But this paper is clearly long enough for the present.

Notes on the Indications for the Use of the Pessary.*

BY WALTER P. MANTON, M. D.

AMONG the labors of Hercules, we read that he drained the Augean stables, which had escaped that process for thirty years, by turning the rivers Alpheus and Peneus through them.

In attempting to answer the above question to-night, we have a task before us greater than that of Hercules, and although we may turn on all the flood of literature which has appeared on this subject during the past decade, it is hardly to be hoped that at the end we shall have made more than a little progress toward the answer of the inquiry.

We may have great book-learning on the subject, or we may be possessed of that *tactus eruditus* which is so desirable, and yet, if we have not a combination of the two, with a flavoring of experience, it avails us nothing.

We may answer this question roughly by saying that the pessary may be used in all cases where, by means of leverage or support a displaced uterus, which will yield to no other rational treatment, may be rectified, or at least remedied as to position, to that extent that it will not interfere with its own or the normal functions of other parts.

We can go still farther, and say that it may be used in cases where other parts or organs are displaced, thus producing conditions which act more or less directly upon the uterus, and tend to cause pathological changes in that organ. Having gone this far, we must stop and distinctly understand that no "hard and fast" lines can be drawn in regard to the use of this instrument, and that at most we can merely indicate the class of cases in which it may prove of service, leaving the decision of its application to the experience and judgement of the practitioner. It seems to me that it is not sufficient to be able to say after bimanual examination that the uterus is verted or flexed one way or the other; but we should endeavor from the evidence furnished by the history of the patient, her habits of life, etc., to get at the factors which have produced the displacement, and direct our treatment, not only to the uterus itself, but also to the root of the evil. There are a great many agencies at work in our modern civilization to produce uterine displacements, or at least those conditions of the uterus which sooner or later result in such displacements.

The inactive life led by the majority of women in the higher classes; corsets and tight lacing; overheated rooms and little outdoor exercise; soft lounging chairs and the popular novel; with many other like "refinements" might be mentioned. I am fully convinced, also, that over-work at school just at puberty, when the physical life demands all the strength which the young girl has, is one of the greatest evils in producing uterine disease. It is a well-known physiological fact that activity of an organ gives rise to an increased blood supply to that organ, a supply which, for the time being, may produce, not anæmia, but a very reduced circulation in other parts.

This great amount of mental work which in these days of cram the school girl has to perform, flushes the brain with blood, to the

*Read as an opening to a discussion before the Detroit Academy of Medicine, Dec. 23, 1884.

detriment of other, and at this period of life, more important organs, namely, the uterus and ovaries. For the reasons just mentioned, the organs of generation are poorly developed, and a condition which Grailey Hewitt has aptly called "uterine starvation" is produced. We have all seen what a difference complete mental rest, country air and physical exercise, with a plenty of milk, eggs, and butter, has made, not only in the appearance and spirit of such a girl, but also in her beginning menstrual life.

Another fruitful source of displacements is the failure of uterine involution after parturition. There can be no doubt that conditions before marriage, a very few of which I have just hinted at, tend to cause this. In many other cases indiscretions on the part of the patient or her medical attendant during the puerperium lead to subinvolution and subsequent displacement of the womb. Endometritis, etc., by softening the tissues lead to versions and flexions, while inflammations in the parametrium and the various uterine ligaments are *frequently* the cause of these conditions.

Uterine and extra uterine tumors and many other conditions, which need not be mentioned here, have an influence in producing displacements. In considering the advisability of using a pessary in a given case, we must consider what *good* the instrument is going to do, and also what harm it *may* do. The indications when a pessary *should not* be used have been sufficiently set forth in my paper on the use and abuse of the pessary, but in order that they may be before us in the discussion of this subject, I will briefly repeat some of them.

The pessary should *not* be used :

1. If there is inflammation about the uterus, or a tenderness of the fundus of the displaced organ. Here preliminary treatment is necessary before resorting to mechanical means for replacing or supporting the uterus.
2. Adhesions should, by proper treatment, be broken up before attempting to replace the womb. There may be certain rare exceptions to this rule, as in the case mentioned last week by Dr. Andrews, and even here other treatment might, perhaps, have effected more than the partial support afforded by the pessary. If adhesions are not attended to first, the results will generally be anything but encouraging to the physician.
3. Where vaginal erosions or inflammation are present.
4. Where a prolapsed ovary is bound down

by adhesions. Here pressure from a pessary causes pain.

In thus determining the use of the pessary by exclusion, we have left all cases where the displaced organ is free—a condition unfortunately too rarely met with. By raising an antverted or flexed uterus, we remove pressure upon the bladder, and enable that organ to perform its functions normally. I have known cystitis caused by the irritation produced by an antispoused uterus to be cured by the use of an antiflexion pessary.

In retro-positions we may have pressure upon the rectum, constipation and hemorrhoids, inflammation, ulceration, and even perforation of the bowel. If any or all of these are to be cured, the pressure must be taken away; and for this purpose the pessary is just the thing.

Great pain, and even convulsions produced by the pressure of the uterus on the sacral nerves are relieved and perhaps permanently cured by means of the support.

A case in point is the one which I mentioned, in the discussion last week, where the patient, a woman about 35 years old, was cured of convulsions by the reposition and support of a retroposed uterus.

In prolapse of one or both ovaries, a bulb pessary which will prevent the ovary from getting behind the uterus, and thus being subjected to pressure, will earn for the practitioner a grateful patient.

In prolapse or sagging of either or both walls of the vagina, a pessary may prevent a displacement of the uterus and all its sequelæ. These two last statements explain what I meant when I said that the pessary may be used in cases where other parts or organs are displaced, and thus produce conditions which act more or less directly upon the uterus.

In early pregnancy, if we find a retroposed uterus, the adjustment of a pessary—the organ having first been replaced, in the knee-elbow position—until after the third month, when the uterus has risen out of the pelvis, may save the patient much suffering, and perhaps an abortion, or even death.²

The relief which a pessary affords to a patient with a greatly engorged retro- or antro-displaced, or a heavy sagging womb cannot be placed on paper.

As a means of aiding treatment in uterine diseases the pessary plays an important part.

Whether uterine displacements can be

² On this subject see Tanner. Signs and Diseases of Pregnancy, pp. 320—442.

cured by mechanical treatment alone, I am unable to say, as my own observations have been mostly confined to dispensary patients, a class appearing and disappearing as soon as relief, or otherwise, is observed.

Consulting the works on diseases of women, I find a general acknowledgment of the great service rendered by the pessary; but as regards the curability of displacements, there is a like reticence. Dr. Mundé, in an article in the *American Journal of Obstetrics*, Vol. XIV., p. 289, discourses at length on this subject, and is rather inclined to doubt the curability of displacements, either by mechanical or other means.

Whether or not this is true, we do know as a positive fact that a very great amount of suffering is relieved and done away with by the proper use of this instrument.

In the foregoing remarks I have only sought to direct your attention to certain points in regard to the use of the pessary. I do not think that I have in the least degree answered the question which interests us this evening. I might say much more, but in the end it would be the same.

The whole use of the pessary cannot be told—it is a matter of individual experience, and one man will use it with success where his neighbor would not have thought of it.

In closing, I beg to append a single case which will illustrate two points:

1st. The mischief which may be done by the improper use of the pessary.

2d. The satisfactory results of its intelligent application.

Mrs. C., American, married, aged 25; no children; no abortions.

Menstruation regular; lasts four days, and necessitates the use of eight napkins. Pain throughout the period.

Duration of sickness, two years.

Patient was always well until three months after marriage, at which time she fell down stairs while menstruating, the result being a severe pain which lasted throughout the period.

Since that time she has worn various external and internal supports. Last summer (1880) the uterus was put in position and a support introduced.

Following this she was in bed for three months with "inflammation."

She complains now of constant pain in the back—painful micturition and constipation.

Physical examination shows a retroverted uterus with adhesions. After about six weeks

of treatment, which consisted largely in packing the vagina so as to break up the adhesions, the uterus could be replaced, and a hard rubber retroversion pessary was introduced, and shortly after the patient was discharged "much improved," with directions to return from time to time, that the action of the pessary might be watched.

80 FARRAR ST.

Epilepsy and Hemiplegia of Syphilitic Origin.

BY S. P. ROOT, M. D., MONROE, MICH.

THE occurrence of epilepsy or hemiplegia as a manifestation of syphilis is not, I believe, sufficiently commented upon by our medical journals. While our text books say that such complications are not uncommon, we see very little, outside of these text books, to keep us mindful of such possibilities, and assist in the diagnosis and treatment of these nervous derangements. So that undoubtedly many cases have been (and are) classed as epilepsy proper, which were of syphilitic origin, a fact to be lamented in that we have remedies so potent to cure or at least alleviate. Quite different is our status in relation to epilepsy pure, or hemiplegia of apoplectic causation. No argument, then, is needed to sustain my position if I say: "If we fail to give timely treatment to these symptoms they will become entities, dangerous to the functions which they involve, and dangerous to life. On the contrary, if we can trace the enemy to his stronghold, we are entertaining sheep in wolves' clothing, and can confidently say, we can cure (or alleviate) that case of epilepsy, or that case of hemiplegia."

The above, then, sufficiently outlines our object in writing this paper, and leads us briefly to notice morbid anatomy, symptoms, diagnosis and treatment. The pathology of these phases of syphilitic infection is simply that of syphilis, and will be found to consist of congestion, vascular enlargements, cell-proliferations, which in turn are followed by increase of connective tissue, giving rise to circumscribed patches of thickening, adhesion of the different membranes covering the brain, softening and gummatous tumors. If the morbid process begins in the vascular supply, the results of arteritis follow, characterized by the involvement of the brain substance adjacent to, and interference with nutrition beyond the seat of disease. This latter fact probably accounts for the aphasic symptoms which so often supervene. Such, then, in brief, are some of the changes to be

noticed, and are sufficiently ample to explain the symptoms under consideration. The minutiae of these changes (and many more) can be found in any of our standard works on venereal diseases—notably that of Bumstead and Taylor. It follows, then, that to determine the causative element we have to seek for the symptoms of syphilis, pure and simple: and were these symptoms always easy of determination, we should have little trouble in diagnosis and treatment. An examination of the throat may reveal traces of old ulcerations; the skin may show the old, coppery scars; the bony prominences may indicate (by nodes, etc.) prior inflammatory actions. These points must be looked to, whether our patient be conscious, unconscious or aphasic. The conditions which interest us are symptoms usually of the late stage—from five to twenty years after infection.

The history of the patient, as given by himself, must be entirely ignored if contradictory to existing syphilitic symptoms. In some cases a patient will admit the disease and time of exposure; in others all will be denied, and any visits to houses of prostitution strenuously denied. But on careful questioning of this latter class, you will probably elicit the fact that they have had intercourse with various women outside of such houses, which makes your case equally strong as if they had resorted to houses of ill-fame. They will tell you, perhaps, that after a certain period of illness they lost a part or most of their hair—this is a good pointer.

The symptoms of syphilitic epilepsy are sometimes quite strikingly those of epilepsy proper; yet, I believe, in the vast majority of instances, determinate differences exist. The paroxysms will be found not to occur with that marked regularity, and are more widely separate. That is, they seldom strike down the patient weekly, monthly, and the like, but may not occur oftener than three or six months apart. Also this form of epilepsy occurs more generally between the ages of twenty and thirty-five, while true epilepsy dates to early youth or childhood. When, however, a paroxysm does occur, it rarely comes singly, but is followed by others in rapid succession. Sometimes as many as eight or ten convulsions occur within an hour, without that tendency to sleep so frequent in *epilepsia gravior*. I have not noticed in any of my cases the so-called epileptic cry. Another and frequent accompaniment is paralysis of certain nerves, or of the arm, or leg, or of both (hemiplegia). More or less head-

ache is generally present, which is often aggravated just prior to the spasms. If these headaches are found to have existed for an indefinite period, with nocturnal exacerbations, you have a symptom pointing strongly to syphilis.

Hemiplegia, when caused by syphilis, usually occurs prior to forty-five years of age; is sudden in its advent, coming on without previous admonition, except it be cephalalgia as above referred to. Both sensitive and motor nerves may be involved, but the motor system is generally the more implicated. The muscles are found (as would be expected) to respond to electricity quite promptly, even after lengthy functional inactivity. Aphasia is a frequent concomitant of right hemiplegia, but when of syphilitic origin, it is as transitory under treatment as the last mentioned symptom. The treatment of these several symptoms is that of the third stage of syphilis, and must be variously modified to meet the constitutional taint; mercury, combined with potassium iodide or potassium iodide combined with such tonics as are indicated. The syrup iodide of iron is a good recommendation when anæmia exists. To control the epileptic convulsions, I have given in conjunction, iodide and bromide potassium. As to dosage, I have never used to exceed forty grs. of each per diem. But if circumstances seemed to require it, I should not hesitate to use ten or twenty grains of potassium iodide every two hours. In addition, when hemiplegia obtains, electricity will fill an important part in conjunction with the above recommendations. The current of the greatest utility is the Faradic, the electrodes being applied direct to muscles, individual and otherwise, as often as every day, or, at least every second day. Strychnine in full doses, 1-20 gr. four times a day, is highly beneficial.

The following case (which is but one of four seen by me during the last three years), in exemplification, will conclude this paper:

Geo. S——, æt. 27, was received into the Monroe county house, April 30, 1884. The officer who brought him stated that a physician was unnecessary, as he was incurable. He was first seen by me May 10, following. I found the following conditions: Patient fairly well nourished; weight about 140 lbs.; motor paralysis of right arm and leg; pulse 85; temperature normal; pupils reacted well to light, with no inequalities; the tongue was protruded in a straight line; involuntary passages from both bladder and rectum. Convulsions were of frequent occurrence—29 had

been counted in two hours—and were characterized by complete loss of consciousness. The paralyzed arm and leg were both raised and the index finger extended during the paroxysm, but would fall lifeless at its termination. The patient was so aphasic as to be able to answer only "yes" or "no," and this he did with that extreme hesitation called 'embarras de parole,' so that it was impossible to get anything like a satisfactory history. An inspection of the patient's body showed a few dark scars and atrophy of the muscles of the paralyzed arm and leg. On the head, over the left parietal bone, was a scar, one by two and one-half inches, with a seemingly depressed center. There was nothing about the throat which I could see that would indicate syphilis. The spasms were not followed by any tendency to sleep. It will be seen that any definite history was unobtainable, and hence, my diagnosis rested mainly between two causes, viz.: fracture of the inner table of the skull, or syphilis. Of these two hypothetical causes, I chose the latter, and ordered potassium bromide and potassium iodide, of each four drachms; fl. ext. taraxacum, one fl. oz.; aqua pura, to make three fl. oz. M. ft. sol., sig. teaspoonful in water every four hours. This was taken for four consecutive days, when I found the patient to be so much improved in speech as to be able to give me something of his history. The scar on the head had been caused by a fall when in convulsions. He stated that he had been subject to the spasms for nearly seven years; that he had been troubled with sores in the throat and an eruption of the skin; that he had had intercourse with different women but did not know of their being diseased; that a physician who attended him several years ago said his disease was caused "by his having had too much to do with women;" that the paralysis came on suddenly about three years ago while in the field plowing; that for several years he had had great headache. The picture was now sufficiently complete to change my prescription to the mixed treatment, giving the same dose of potassium iodide with mercury biniodide 1-40, four times a day. To the paralyzed members I applied the Faradic current in full strength. The muscular electro-contractility was found to be materially lessened, but I was pleased to notice a quite rapid improvement.

In due time he was given strychnine, iron, etc.; in fine, the treatment was variously changed to meet indications, so that in seven weeks' time he was able to walk about the

house, and had no inconsiderable grip in his right hand. For the past three months he has worked about the county farm more or less constantly; has gained flesh; the existing paralysis is only trifling, and is continually growing less. There has been no return of epilepsy, and all headache has disappeared. He says the only medicine which had been recommended to him was "bromime," but that he seemed to derive but little benefit from its use. In conclusion, it may be said I have placed the probabilities of cure in these states in too certain a light, and so I have, if the degeneration has been allowed to go unrelieved for an indefinite period, yet I am forced to believe that even in the worst forms, these symptoms are more susceptible of alleviation or cure than any similar state where a syphilitic causative element does not obtain.

Proceedings of Societies.

Detroit Academy of Medicine.

Nov. 18, 1884.

The Academy met at the office of Dr. Yemans, Dr. Long presiding.

WRITTEN COMMUNICATIONS.

Dr. Jenks called attention to an error in the report of his remarks at a recent meeting, in commenting on a case of ovariectomy. (See LANCET, Jan., 1885, page 306.) He was represented to have said that he had never seen a case recover when there were extensive adhesions of the *bladder*. What he had actually said was that he had never seen a recovery in a case when there were extensive adhesions in the posterior part of the pelvis cavity.

Dr. Lyons read a paper on the alleged new emmenagogue, carbonate of titanium, from which it appears that the article in question is not a carbonate, nor a compound of titanium, and that it is not a new emmenagogue, if indeed it can properly be called an emmenagogue at all, and that although it is advertised as an agent for procuring abortions, it probably is as harmless in that respect as any other preparation of iron.

Dr. Connor read a paper, introducing the discussion of the evening, being an account of the experiences of a chloroform habitué. (See LANCET, Dec., 1884, p. 251.)

Dr. Wyman: To judge from this account, the effects of chloroform are not very differ-

ent from those of alcohol. The visions described by the writer are more like those produced by opium, or by hashish.

Dr. Bradley: Until I heard the paper read last week, I was ignorant of the fascination which chloroform has for some persons. In view of that paper, however, and of the narrative just read, I can only congratulate myself that I have never recommended its use to my patients. When I have had occasion to make any use of it, at least by inhalation, I have always administered it myself. The visions, or hallucinations produced by chloroform, probably, like those due to opium, are not experienced by all alike. They depend on idiosyncrasy.

The physician, when required to perform operations, cannot always choose his assistant. I have often been obliged to entrust the administration of the anæsthetic to some one not a physician, or even a medical student, and although I have realized that there was danger in this, I have never met with any misadventure.

My experience in the use of chloroform in midwifery has not been as gratifying as that of some who have spoken on this point. In more than half the cases where I have used it, labor pains have stopped, and I have often been compelled to resort to the forceps to complete the delivery. I employ chloroform, myself, in operations, rather than ether. The stage of excitement is often prolonged when ether is used, and not unfrequently the patient passes through a second period of excitement when coming to after the operation, and this may be very dangerous as well as disagreeable. One patient, whom I attempted to etherize, sang camp-meeting songs a full hour before he yielded to the anæsthetic, and repeated the performance after the operation was finished.

In England the bichloride of methylene seems to be preferred by some surgeons to chloroform; in this country it is scarcely employed at all as yet. I am inclined to believe that the accidents which have led many physicians to regard chloroform as a dangerous anæsthetic have been due either to carelessness in the administration of the agent, or to the use of an impure article. Dr. Holland, a surgeon in the army, used to say that there was no danger from chloroform, provided the patient could get enough air.

Dr. Maire: Physicians are apt to use too much chloroform when they use it at all in midwifery cases. As has been already said, the full anæsthetic effect of the drug is not

necessary or desirable. I have seen two cases of severe hæmorrhage post partum, when chloroform was used. Except in rare cases, I do not employ it during labor. I think nothing is gained, generally.

Dr. Yemens: There seems to be a difference of opinion among physicians regarding the proper way of dealing with such habits as that under discussion. My own practice has been to remove the stimulant at once. I think nothing is gained by prolonging the patient's misery in a course of tapering off. Many patients declare that they cannot live without their stimulant, but they have lived, and in a very short time have found that life could be very tolerable.

Dr. Andrews: This subject is a very suggestive one. It is singular what a difference in susceptibility we find in different individuals with regard to inebriating agents. I suppose the most of us have no conception of the fascination there is for some persons in intoxication. To one person a dose of opium seems to open the gate of paradise. To another hashish, or chloroform, brings dreams more delightful than any of the realities of earth, while to many the experiences of intoxication by any of these agents are such that they shun any repetition of them. The instantaneous relief which chloroform sometimes gives us from pain, such as that of a sick headache, makes this a particularly dangerous remedy to some persons. I have seen at least one case where I am sure the patient would have become addicted to the use of chloroform if she had once been allowed to inhale it knowingly during her attacks of sick headache.

I knew of one interesting case of the chloroform habit, years ago, when I first came to Detroit. The victim was hospital steward at the barracks—it was in war time. He was a confirmed chloroform drunkard. I had little control over him, and it was impossible to prevent him from getting the chloroform, which he used constantly. I did not learn his subsequent history, but I often saw him afterwards, and I should judge from his appearance that he had abandoned the use of the drug.

In obstetrical practice I have used ether and chloroform about equally, but I now give the preference to the latter. Only in exceptional cases, however, is its use justifiable. There is danger, especially, of hæmorrhage where it is used. Either ether or chloroform, if given in quantity sufficient to secure comfort to the patient, causes generally cessation

of the labor pains, and so prolongs labor. It does not, therefore really diminish the patient's suffering.

Dr. Wilson: With my present views, I should use chloroform in obstetrical practice as little as possible.

Dr. Noyes: In listening to the narrative that was read, it seemed only a marvel that the patient lived to tell the story. Chloroform affects different persons differently. When I inhale it, I seem to myself to be flying through the air over beautiful valleys and through a land of enchantment. It is not strange that one forms the habit of using it. I do not think the doctors are to blame for the spread of this habit. The people have become too familiar with the effects of medicines, and are no longer afraid of them as they once were. We find even women using morphine by hypodermic injection. The laity have learned just enough about the use of medicines to do themselves and others incalculable harm.

Dr. Long: I would like to say a few words on this subject. I scarcely knew, until I heard Dr. Clark's paper, that there was such a thing as the chloroform habit. I recall a case, however, that came to my knowledge years ago of a lady who formed this habit by using chloroform first to relieve sick headache. Her friends endeavored to prevent her from procuring the drug, and even put her sometimes under restraint, but she would elude their vigilance, and she finally was found dead in bed with her husband, but with her chloroform bottle under her pillow. I have always used chloroform and no other anæsthetic, and have never seen any accident from its use. I am just as careful, however, in using it as I ever was. I have my own method of giving chloroform, and in hospital practice, where it is so often necessary to entrust the administration of the chloroform to a student or nurse, it is especially important to have some fixed method of giving the anæsthetic. I use a sponge placed loosely in a paper cone, which is open at the top as well as the bottom, so that it is impossible to prevent the patient from getting plenty of air. I always take care that the patient has an empty stomach, and I always examine the heart. I tell the patient that there may be some disagreeable sensations produced by the chloroform, but that these will pass off soon; that I impress upon him just before I begin to give him the chloroform. Then I allow the patient at first to become a little accustomed to the chloroform, approaching it

gradually to his face. In this way I almost invariably succeed in putting him quietly to sleep in a very few minutes, and I use an astonishingly small quantity of chloroform. I have kept a patient an hour under the influence of the anæsthetic, and used only about two drachms of the fluid. Nationality, I find, has a good deal to do with the effect produced. The Irish are apt to be noisy, with a disposition to fight and cut up. Germans are good natured, and often moved to sing. Americans are generally not demonstrative. Negroes come under its influence most readily and most quietly of all.

Adjourned.

Nov. 25, 1884.

The academy met at the Marine Hospital office, Dr. Long presiding.

There being no paper to be read, Dr. Clark introduced an extemporaneous discussion on the supernatural. There has recently been appointed in England a committee of scientific men to investigate that class of phenomena generally called spiritual. They are expected to give their attention to those numerous cases in which effects are produced by causes which as yet are beyond our ken.

That there are forces and laws in nature of which we at present know little or nothing every man who reads, and observes and thinks must admit. Supernatural intervention is not the only explanation to be given of the phenomena which we do not understand, neither is science at liberty to deny the existence of a power, or of powers, which superstition considers supernatural. Bishop Carlyle has written an article recently on the subject of these phenomena, published in the *Contemporary Review*.

The committee of which I spoke has submitted a preliminary report, which, however, I have not yet seen.

I believe there is also a society in this country whose object is to collect facts bearing on spiritualistic phenomena, as they are termed.

Dr. Adam Clark, in discussing the subject of the Witch of Endor, expressed the view that the apparition of spirits might be a fact of history; that for certain purposes of good or evil, spirits might manifest themselves to living men.

The Keely motor may be all a humbug, but, on the other hand, it is possible that there does exist an etheric or vaporic force, which

science has hitherto overlooked and which is capable of producing such effects as Keely expects from his motor. The recent experiments he has made prove that he has some basis for his claims; it is certain that the ether by which we are surrounded is permeated with force, which might, if we knew how to control it, furnish an unlimited supply of power. These ideas are simply thrown out with the view of drawing out discussion.

Dr. Long: The subject suggested might be profitably considered, provided we do not bring theology into the discussion.

Dr. Connor: I have no doubt that there are forces around us which we know nothing about. Concerning apparitions, I can only say that I know nothing. It is not for me, therefore, to express an opinion. I never have believed that the human race has begun yet to master the truths of the universe about us. No scientific man will deny the possibility of that concerning which he has no evidence. It is true that many so-called scientific men do so stultify themselves. They know so much about these matters that, while they can affirm nothing they can deny absolutely certain possibilities. This is unphilosophical.

Dr. Andrews: An illustration of the imperfect and fragmentary character of our knowledge of the world around us is found in the circumstance familiar to all of us, that the eye takes cognizance of a very small number only of the radiations which constitute light. Some eyes, indeed, apprehend only a portion of those rays that form the visible solar spectrum. The normal eye perceives the rays which we call red, yellow, blue, violet, etc., but there are vibrations more rapid than those of violet light, and others slower than those of red light to which the retina is not at all sensitive, but which may be recorded on the photographic plate—and in sensitized surfaces even we find a great difference. That any plate or film yet devised is capable of responding to all the vibrations, we are at liberty to doubt. Now if this is true of that agent by means of which we obtain the most of our knowledge of objects about us, how insignificant must be that knowledge, as compared with that we cannot apprehend.

As regards the Keely motor, that is a matter concerning which we may judge much by inference. It is certain that Keely makes money enough out of his motor to live on, and he seems to be the only one who does make anything out of it.

Dr. Clark: Our government could afford however, to pay something for a force capable of producing such effects as Keely has recently shown.

Dr. Andrews: No doubt compressed air may accomplish astonishing results, but gunpowder will do the same thing, at much less expense.

Dr. Lyons: All Keely's methods are those of a charlatan. He talks learnedly about vaporic force, but his language only betrays the poverty of his own conceptions of what such a force really may be. Nothing that he has yet done has changed the opinion I formed of him when I first read of his motor. Sir. Wm. Crookes, as a scientific man, has made a careful study of inter-atomic forces, and he has shown us that light, even, is capable of moving masses of matter. It is only along the line of patient researches, such as his, that we may hope to arrive at truth in regard to these occult forces and phenomena. Crookes, I may say, is, or has been, a believer in spiritualism, but as a scientific investigator, he has nothing to do with hypotheses, except to bring them to the test of experiment.

I am not so sanguine as some in regard to the possibilities that lie in the future of science. That we shall learn a great deal of what we as yet have not dreamed of, it is safe to predict, but there must be a limit.

Our perceptions come to us through material organs of sense. Only as these sense-organs are susceptible to molecular or atomic—possibly, even to ethereal—vibrations can we be brought into relation with our surroundings. Now, it is probable that there is everywhere universe within universe, molecules are made up of atoms; atoms which singly are unappreciable to our senses, are perhaps made of ethereal matter, of vortices, who knows? and here, almost before we start, our progress is interrupted by an impassable barrier.

We may by inference possibly overleap the first barrier, but only to find another beyond, and this must be the end of every advance we make in science.

We are surrounded by a great unknown. As scientific men we have an intense curiosity to know the mechanism of this cosmos, and we make here and there a discovery that enables us to wield a little of the power that flows in and through it all. There is another element in our nature, to which these things appeal, to excite emotion, to kindle æsthetic feelings, to inspire us in a thousand ways.

We are not true to ourselves, if we allow our narrow, scientific methods and bias to overshadow this larger manhood of ours. As scientists we explore every field to which our senses give us access. As men we pass over the trammels of scientific methods and live, love, act. Science will do no more than improve the mechanism by which we reach this or that end.

I am glad that scientific men are turning their attention to problems that heretofore have been considered inaccessible to scientific methods. I believe that they will reach valuable results, but there is much, that, as scientific men, they never can learn anything about, and only when they admit this to themselves, will they be worthy of the name they arrogate to themselves.

Dr. Noyes: I have no doubt, after all the discoveries of the past, that we shall go on to learn more and more of natural phenomena. I cannot regard anything which has come within our knowledge as super-natural. We must, of necessity, give to every new fact its place in nature. It belongs to the domain of law, which includes every province of the universe. Beyond this, I must admit that I am agnostic.

Dr. Long: Many of the forces which we now familiarly employ were only vaguely known to us a few years ago. I can remember when electricity was thus regarded, even by educated men, but to-day we are employing it with the same definiteness of purpose and plan with which we employ steam.

Dr. Noyes: The mere fact that a thing is wonderful does not make it super-natural. The telephone is a marvel to us in this generation, but it merely uses a natural law, which, when it becomes familiar to us, excites no wonder in our minds.

PATHOLOGICAL SPECIMENS.

Dr. Noyes exhibited an eye which he had removed a few days since. The patient was a young married man, 26 years old. Fourteen years ago he lost the sight of one of his eyes by an explosion of gunpowder. A few weeks ago he received an accidental blow in the same eye, which burst the eyeball. Fearing sympathetic ophthalmia, I removed it. In this case I might have used the new anæsthetic, and rushed into print with the case. I believe that there is a great deal of exaggeration in the cases that have been thus reported. More has been claimed than future experience will sustain. In this case, however, I used chloroform. The man was so

horrified at the idea of removing his eye, that even if I could have rendered the parts insensible by the use of cocaine, he would hardly have permitted me to make the operation. Under the influence of chloroform, however, and with the aid of Dr. Gilbert, I took out the eye.

Cocaine is already used for almost everything. Statements are somewhat conflicting with regard to the effects produced in different cases. One Boston surgeon says that he removed a tumor from the face of a patient painlessly by its aid. Another in a similar case, reports that he found no benefit from it. I have myself used cocaine in the eye, ear and throat. A gentleman had had a chronic trouble of the pharynx, which had reached and involved the vocal cords. He had one of those open throats in which you can easily see the epiglottis. I applied a solution of the muriate of cocaine to the vocal cords, to the speedy relief of the irritation and hoarseness. I repeated the operation twice afterwards, each time giving great relief—more than he had experienced from any other remedy. The treatment, however, involved so much expense that I resorted, after four applications, to other measures, under which the patient is improving.

Dr. Connor: One use of cocaine is likely to be of particular value. This is the application of the solution in acute coryza, to the swollen mucous membrane of the nares. Dr. Bosworth, of New York, says that such an application, made by a spray apparatus speedily reduces the swelling, enabling the patient to breathe with comfort.

Dr. Noyes: Otagia is said to be relieved by the remedy. One case is reported of its use in removing a polypus from the nostril.

Dr. Andrews: I have tried it by hypodermic injection in two cases of sciatica. One of the cases was of ten weeks' standing. The intense pain was relieved for nearly 24 hours after each injection. I used 12 drops of a two-per-cent. solution. In the other case—one of long standing, little or no effect was produced.

Dr. Long: In some of these cases the hypodermic injection of distilled water relieves the pain.

Dr. Connor: I have continued to use cocaine in my practice, with results as favorable as those at first reported. I have observed no further inflammatory effects. Probably the remedy will be used in cases where it will not only do no good, but may be positively

injurious, but it is not so dangerous a remedy as jequirity, which has been abandoned by many oculists as unsafe, although in properly selected cases capable of doing good service.

Dr. Noyes: Many of the statements that were made about jequirity were nothing less than lies. Of course it is a good remedy in some cases, as a dernier resort—in granular lids. It is better than inoculation—the alternative.

Dr. Connor: Recurring to the subject of chloroform, I have seen accounts this week in the papers of not less than eight cases of death from this anæsthetic. Some of these were in the clinic of Bilroth. There seemed to be no especial cause for unfavorable action in any of these cases.

Adjourned.

DEC. 2, 1884.

The academy met at the office of Dr. Connor, Dr. Long occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Wilson read a paper on some points of resemblance in history, symptoms and treatment between syphilis and diphtheria.

DISCUSSION.

Dr. Cleland: The doctor has struck an original vein in this paper. I do not remember that I ever saw in print the idea he has promulgated. He takes some things indeed for granted that are not yet proved. We know that in syphilis the initial lesion is the result of contact, of some thing capable of absorption, while we cannot say that any such thing is as yet proved in the case of diphtheria.

The glandular enlargements, are especially a point of resemblance between the two affections. The subject is one which should be investigated further.

Dr. Connor: The subject is one which interests me a good deal. It is always profitable to view old facts from a new standpoint, as the writer of this paper has done. In addition to what was said about the similarity in treatment of the two affections, I may say that, not only is it true that mercury and iodide of potassium are in both cases remedies of the greatest value, as has been pointed out, but that in syphilis, as well as in diphtheria, the best effects are only obtained when iron also is used. Iron, we are told, is a tonic. Tonic to what? The tincture of iron, whatever else it may do, is one of the

most efficient of parasitocides we have: The value of this remedy, like that of the mercurials, appears to be closely related to its power of destroying the vitality of certain low organisms, or imperfectly developed cell formations.

Dr. Flint has pointed out the circumstance that the remedies which have the widest confidence of physicians in the treatment of acute affections, quinine, mercurials, iron, etc., are all parasitocides.

Some writers place in one class all the exanthemata and all fevers, including pneumonia.

What we need, more than the collecting of new facts, is the ability to so group those facts already in our possession that each will enable us better to understand the rest. Science indeed concerns itself less with individual facts than with the relations of facts one to another. All practical conclusions—the generalizations of science—are the results of this study, not of isolated but of associated phenomena.

Dr. Gilbert: Just how far the analogy pointed out by the writer of the paper may hold good, I cannot just now say. Admitting the many points of similarity between the affections, we must own that there are also essential differences. We never hear of a chronic diphtheria, while syphilis tends always to assume a chronic character.

The one thought, however, which suggested itself to me in connection with this subject, was the unscientific character of our nomenclature of disease, so far at least as relates to treatment. We are sometimes told that a certain remedy is useful in a certain disease. Now we do not, in fact, treat the disease at all, but the patient. The symptoms guide us in the employment of remedies, and as the former change in different stages of the disease so must we adapt the latter to the changed conditions indicated by change in symptoms.

It would seem useful in practice to employ a nomenclature based not on etiology or pathology, but rather on symptomatology. We should then better, perhaps, comprehend the science of therapeutics. We should at least recognize the fact that our medication is not directed against any entity of disease, but has to do with the vital processes as modified by morbid conditions.

Dr. Lyons: This seems to me to be a return to the oldest ideas and nomenclature in medicine. Remedies formerly were classified with reference to the particular indica-

tions they would fulfil, not in modifying pathological conditions, but in combating certain symptoms.

Dr. Long: I had a sailor come into the office at the hospital last spring. There is always a probability with this class of patients that their trouble may prove to be syphilitic. This was a hearty, vigorous man, who would weigh 180 pounds. I noticed that his eyes were congested. He said he had a sore throat. I found in the pharynx what I at first took to be mucous patches. The prepuce and glans penis showed a similar condition, which also affected the rectum. The case might easily have been supposed to be syphilitic but for the history. It was, in fact, one of diphtheria. The patient recovered in a few days.

It is unusual to find diphtheria in a child of this age.

Dr. Connor: We often read of physicians attempting to suck out the material that occludes the air passages, after tracheotomy for diphtheria. Many have lost their lives as a result of their rashness in this attempt. It seems to me that there is nothing praiseworthy in such a sacrifice of life, as a rule the patient dies in any case, but if perchance its life is saved, it is not as the result of any such measure, for it is obvious that an attempt to clear the air passages by sucking, must be futile. There is a much better way of accomplishing the object, and one that involves no danger to the physician. Insert into the wound a gum-elastic catheter, and by means of a Davidson's syringe, force air into the lungs, and the obstruction will be readily removed.

Dr. Andrews: Precisely how is it that diphtheria is ordinarily communicated we cannot yet tell. It is rarely that one member of a family takes the disease from another, except in the case of children. The parents and attendants or the physician, who breathes the infected air day after day, as a rule, escape. It seems to me that there is required some peculiar susceptibility on the part of the patient. We can hardly suppose that this susceptibility depends on the existence of abrasions; it would seem to be rather something in the general condition of vitality.

Dr. Long: Syphilis must be propagated, and always is by inoculation, diphtheria frequently appears when he can trace no direct contagion.

Dr. Gilbert: The poison must find its way into the system somehow. It appears to be

by inhalation—certainly not through mere contact.

Dr. Andrews: Of late I have ordered as a prophylactic for those exposed to diphtheria, a very dilute solution of corrosive sublimate—one grain to eight fluid ounces. So few, however, take the disease where no such prophylactic measure is adopted, that I am not prepared to affirm that it has any efficacy.

Dr. Connor: The proportion of those exposed to diphtheria who escape is perhaps not greater than that of those who run risks of syphilitic infection, and do not suffer the consequences.

VERBAL COMMUNICATIONS.

Dr. Gilbert: Two or three weeks ago I was called on to perform a paracentesis abdominis upon a woman. The patient several years ago had some difficulty which resulted in dropsical effusion, which was however at that time absorbed. Recently she has had a return of the ascites, and the accumulation of fluid had become very distressing to her. I removed as much as eight gallons of bloody serum, which must have weighed nearly as much as the patient herself, after the operation. I could not account for the bloody character of the fluid.

The accumulation has not yet returned.

The patient is about 52 years old.

Dr. Connor exhibited a new inhaler in which a dense fluid, such as petrolina oil, or glycerine, appropriately medicated, is "atomized" in a glass receiver, from which the patient may inhale the vapor. In certain cases this form of apparatus will have advantages over the ordinary atomizer, which throws the medicated vapor or spray directly into the throat or nares.

Adjourned.

A. B. LYONS, M. D.,

Secretary.

W. H. LONG, M. D.,

President.

Health in Michigan.

For the month of November, 1884, compared with preceding month, the reports indicate that tonsilitis, bronchitis, neuralgia, and pneumonia increased, and that dysentery, diarrhœa, cholera infantum, inflammation of kidneys, cholera morbus, intermittent fever, and remittent fever decreased in prevalence.

Compared with the average for the month of November in the six years, 1879-84, diarrhœa was more prevalent, and diphtheria,

intermittent fever, and consumption of lungs were less prevalent in November, 1884.

For the month of November, 1884, compared with the average of corresponding months for the six years, 1879-84, the temperature was slightly lower, the absolute humidity and the day and the night ozone were less, and the relative humidity was more.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of November, 1884, at 40 places, namely: Adrian, Alton, Armada, Bloomingdale, Byron, Big Rapids, Constantine, Cooper, Decatur, Detroit, East Saginaw, Evangeline, Fruitland, Grand Rapids, Hastings, Howard City, Kalamazoo, Lansing, Leeland, London, Muskegon, Mainstey, Mendon, Orange, Pinconning, Portland, Port Huron, Portage, Pontiac, Romeo, Richmond, Smith's Creek, Schoolcraft, Vicksburg, Verona, Vergennes, Vassar, Wyandotte, Warren, and Watervliet; Scarlet fever at 22 places: Albion, Algonac, Armada, Rockway Center, Cadillac, Center Plains, Detroit, East Saginaw, Freesoil, Grand Rapids, Kalamazoo, Lansing, London, Manistee, Muskegon, North Muskegon, Pontiac, Portland, Roxand, St. Johns, Vassar, Vicksburg. Measles at six places: Detroit, Grand Rapids, Kalamazoo, Port Huron, St. Joseph and Whitehall.

For the month of December, 1884, compared with preceding month, the reports indicate that inflammation of kidneys, influenza, and rheumatism increased, and that typhomalarial fever, diarrhœa, and intermittent fever decreased in prevalence.

Compared with the average for the month of December in the six years, 1879-84, inflammation of bowels, cerebro-spinal meningitis, influenza, neuralgia, and erysipelas were more prevalent, and intermittent fever, diphtheria, consumption of lungs, pneumonia, and membranous croup were less prevalent in December, 1884.

For the month of December, 1884, compared with the average of corresponding months for the six years 1879-85, the temperature was considerably lower, the relative humidity was more, and the absolute humidity and the day and the night ozone were less.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of December, 1884, at 49 places, namely: Amsden, Armada, Ann Arbor, Byron Center, Bruce, Boardman, Bloomingdale, Constance, Cadillac, Detroit, Danby, Dowagiac, Emmett, East Saginaw, Franklin, Green

Oak, Grand Rapids, Genoa, Hanover, Holly, Hudson, Hastings, Harrisville, Ingham township, Ishpeming, Kalamazoo, Lowell, Meredith, Muskegon, Marengo, Manistee, Northville, Owasso, Orange, Orleans, Pinconning, Pontiac, Porter township, Port Huron, Quincy, Royal Oak, Richmond, St. Johns, Texas, Vassar, Venice, Vernon, Watervliet, Wyandotte. Scarlet fever at 36 places: Armada, Albion, Brockway Center, Carson City, Detroit, Dowagiac, East Saginaw, Freesoil, Fawn River, Grand Rapids, Grand Haven, Garfield, Hanover, Howell, Ida, Ishpeming, Ithaca, Kalamazoo, Leavitt, Lansing, Leelanaw, Manistee, Muskegon, Negaunee, North Muskegon, Northport, Owasso, Pontiac, Quincy, Sears, South Haven, Texas, Thornville, Westphalia, Whitehall, and Wyandotte. Measles at six places: Detroit, East Saginaw, Fawn River, Grand Rapids, Port Huron, Whitehall. Small-pox at South Boardman.

HENRY B. BAKER,

Secretary.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Fees For Professional Services.

THESE are no more difficult or important questions relating to the material life of the physician than those connected with professional remuneration. All are compelled to face them sooner or later, unless, like the better class of physicians in England, they inherit a sufficiency to keep them in good style without work. Among the plans suggested are the following:

1. The Chinese plan of paying while well, and stopping pay when sick.
2. To place sick and well under medical supervision, and pay according to fixed rates.
3. To pay on the principle of no cure no pay.
4. Pay a medical man when called, and call as wanted.

The first of these plans has never come into operation in this country. The third has by common consent been relegated to quacks. The second has, in modified ways, come into operation.

Many insurance organizations, social bodies, benevolent associations, and private sanitariums, are conducted on the principle of paying the doctor so much per head a year, sick or well. The objections to this plan are

many. It usually results in the physician receiving but a small proportion of the actual value of his services. He is expected to get the rest of his pay in the advertising he will obtain by his connection with the body. It tempts him to eke out a better living by resorting to sharp practices, derogatory to the honor of his profession. In some of the private bodies it is objectionable in that agents are sent about town drumming up members, basing the advantages of their institution upon the fact that their doctor is the best in town, and doctoring will be so cheap. Thus an invidious comparison of doctors is made.

The rules of the professional drummer are substituted for the rules of gentlemanly conduct, and professional merit upon which all honest, competent physicians depend for their professional advancement. Altogether, this plan is wholly bad for all concerned. The other plan of paying according to the quantity and quality of work done, is the one usually followed. But here the estimate of the value of the quantity and quality of work is a difficult problem. Other things being equal, the experienced man is more valuable than the inexperienced. One is of more value in one class of cases, and another in another class. So there is great variation. Then the prices must vary according to the community in which the doctor lives. But with all these variations, and many others, the honest physician often finds himself in great perplexity.

What shall he do? We suggest. In any given community, find out the prices actually charged by the several doctors. Charge according as you think your services are worth compared with your colleagues. If this be done, there will be a constant stimulus to endeavor to make one's self worth as much or more than the best doctor in the community, by hard study and strict attention to every detail in each case, by brining to bear upon the treatment of each case all the knowledge of the present medical world. This calls for constant study of medical journals, attendance upon medical societies, and the purchase of needful instruments and apparatus. If one thinks he is worth twenty-five cents a visit, then charge no more; but, if one thinks he is worth two or five dollars per visit, then let him charge two or five dollars. Of course, each will remember the circumstances of the patient, and charge not beyond the patient's ability to pay, without actual suffering.

Then the wise physician will send in his

bill as soon after he renders service as is decorous. It is a good plan to follow the rule of general business men in this regard. Indeed, such men usually prefer to have their doctor's bills settled in this manner. If no notice be taken of the bill within a reasonable time, it should be again presented, and measures taken to determine why it is not noticed. Of course, the physician's personal knowledge of the nature of each family and their circumstances, will enable him to decide how much it is wise to press the payment of any particular bill. But it may be stated, without fear of contradiction, that the sooner a doctor's bill is settled, the better will it be for all parties. If patients can pay and will not, it is of value to know this fact as soon as possible. Short credits in doctors' bills make long friends. "Collect the fee while the tear is in the eye," was wise advice from the old Scotchman. It is all folly to suppose that any sensible family will be offended at the presentation of the doctor's bills at such intervals as they are accustomed to pay for other services. Personally, we never regretted presenting a bill too soon, while we have occasion to greatly lament at large losses from bills not presented soon enough.

Settle up bills at any cost. A small bill promptly paid is far better than a large bill paid tardily, and with great reluctance. Settle up all bills that are due monthly. Services are then fresh in both doctor's and patient's mind. All misunderstandings can be readily explained, and the bill is relatively small. Adopt such a system of book-keeping as will enable one to tell at a glance every item of service charged to each patient. The bad business habits of a doctor are a source of loss to himself, his family, and of harm to his professional brethren and the community at large. The whole matter may be summed up in two sentences. Be worth a good fee to your patients. Then collect the fee, such as the circumstances of the patient will admit, promptly, and put it in the bank, pay your debts, or invest it in real estate, or some business enterprise. So will the years be filled with plenty to each physician, increasing with advancing years.

Emmet on the Social Conditions as Related to Development.

PROTESTS long and loud are heard with increasing frequency against the ill effects of education and social life, especially upon the health of girls. In his late work upon

Diseases of Women, Emmet gives a most forcible chapter on this topic. There is little in it new or beyond the ken of most observers, but that he should deem the matter of such importance as to begin his work with it indicates the great impression it has made upon his mind. He shows how the girl of the period is made a woman while yet a mere child in development. She is made to have the associates of a woman, to keep the hours of a woman to be stimulated by the same passions and emotions as a woman. In spite of the evils of this state of things society is so constituted that even the most conscientious parent is unable to wholly protect her daughter. Her clothes both undress and over dress, hats and shoes are all so arranged as to induce the greatest amount of disease, with the least real comfort and freedom. Then she is so kept out of the sunlight and fresh air as to still farther deteriorate all bodily functions. At the time when her entire nervous energies are taxed to their utmost to provide for the full development of her organs of generation, this force is deflected by hard study, or some temporary accomplishment, to be thrown aside after marriage. She is subjected to the emotional influences of music and light literature, which in a sensitive nervous system are capable of arresting the development of the uterus and ovaries. The spirit of emulation which is encouraged at all schools has a deleterious influence upon the nervous system of girls at any age, but particularly about the time of puberty; and those least fitted to bear the strain always make the most efforts.

Emmet claims that it is impracticable to educate a girl by the same methods as has been found best for boys, without entailing serious consequences, for the ovaries will always be arrested if the development of the brain be forced. He fully endorses the views of the late Dr. F. H. Clarke, of Boston, and adds that his own experience proves to him that the evil is far more serious than Dr. Clarke represented it to be. He advocates the highest grade of education for woman in keeping with her means and station, but he deprecates the wrong method which has been employed and the wrong period of life which has been settled upon for obtaining it.

The young girl should pass the year before puberty and the two years following it free from all exciting influences. She should be kept a child as long as possible and made to associate with children. Her dress, diet and habits of life should be carefully looked after as if she were a child, and the habit of regu-

larity should be enforced in all details. Systematic exercise should be given her, so that every muscle in the body should be perfectly developed. This should be so arranged as to combine recreation and pleasure; jumping rope, walking, riding on horseback, rowing, fencing, swimming, skating, within the bounds of prudence should be regularly practiced, so that a taste for muscular exercise may be acquired that shall become an imperative demand of after life. The mind should be occupied with a very moderate amount of study, with frequent intervals during the school hours, of a few moments each day spent in the open air. There should be no studying at night, until the system becomes accustomed to the new functions.

Each menstrual period should be passed in a recumbent position. There should be no exposure to cold or over exercise during twenty-four hours before the expected period. After the menstrual function has become permanent, normal in character, and comparatively free from pain, the number of studies can be increased in number, but at the recurring molimen the same rule of rest, mental and physical should be observed.

He holds it the duty of the mother to inform her daughter respecting menstruation about the period of puberty, and instruct her in the care needful to be taken to retain perfect health. If it be so desirable for a young woman to acquire the higher branches of education she should first gain the most perfect physical development. She should spend the same years in the completion of her studies as is given to his college training by a young man.

The simpler the mode of life of the girl the better is she fitted for the work of after life.

He believes that the over training of the mind; the promiscuous education of boys and girls beyond their station of life, and often in the most superficial manner, has borne but poor results. He asks how far this system has helped to fill houses of prostitution with girls who had been educated to be ashamed of their surroundings at home, and the penitentiary with boys who would feel degraded longer to grasp the plough handle.

The Cocaine Craze.

It is safe to say that the introduction of no drug has ever created such a vast amount of enthusiasm, in so short a time, as has the introduction of cocaine as a local anæsthetic. This is doubtless due to several reasons,

Perhaps no drug was ever offered to the medical profession, whose action physiologically was so well demonstrated, and could be so readily proved, as that of cocaine. The claim for it was that it stopped entirely the sensibility of the nerves of the conjunctiva. To prove this required no elaborate apparatus, or complicated observations. Nor was a sick man even needed. The doctor could use himself as a subject with entire safety. And he has used himself. He has not only tested the drug on his conjunctiva, but in his nares, his pharynx, his larynx, etc.

It could be applied to the diseased with equal safety and ease.

The literature pertaining to this drug has already become immense. It has been used for the performance of every possible operation on the eye, nose, pharynx, and larynx. It has also been used extensively by the gynecologist, and the genito-urinary surgeon. The general surgeon has also largely employed it. The clinical physician has also used all of the drug left him by his more active surgical friends. It is too early to settle the definite results of this vast amount of clinical study. But there are some things that are apparent.

1. Like all other anæsthetics cocaine fails to produce local anæsthesia in a small proportion of cases.

2. It, like other anæsthetics, acts badly in a certain proportion of cases.

3. In most cases it completely allays the sensibility of all sensitive nerves with which it is brought in actual contact. Unlike many other anæsthetic agents, it has little or no power of producing its characteristic effects, through skin, or muscular or thick connective or other tissues, than the actual nerves. Hence operations of any considerable depth from the surface require to be proceeded with slowly, the nerves of each succeeding layer being anæsthetized before the cuts are made. This has been done by frequent instillation along the course of the knife, and by hypodermic injections, deep into the tissues, or into the sensitive nerves distributed to the area desired to be operated upon.

4. Thus far it has won its greatest and most frequent triumphs in cases of eye and nose surgery. Many have already reported failures, but the majority of observers have found it satisfactory beyond their most sanguine anticipations. It has come to stay as one of the most valuable additions to the materia medica since the introduction of general anæsthesia.

5. That it is practically non-poisonous renders its use far more satisfactory. Eight grains have been taken internally at one dose without any serious effects.

6. Its value as a mydriatic in cases calling for an ophthalmoscopic examination is incalculable. Its effects on the pupil soon disappear, and its influence on the accommodation is so slight as not to change the ordinary use of the eyes. Its mydriatic power is so feeble that it is useless in cases of iritis, and it is futile to relax spasm of the ciliary muscle.

7. The strength of the solution varies, for the eye the 4 percent. solution seems to give the best satisfaction, while for the larynx a 20 percent. is often employed. In very many cases we have found a 2 percent. solution perfectly satisfactory.

8. Several salts of cocaine have been introduced. We find that there is little difference between the hydrochlorate, the salicylate, and the citrate. The salicylate keeps best, and for this reason may prove preferable. The oleate has no advantages that we have been able to see. The citrate is perhaps less irritating than some specimens of the hydrochlorate.

9. Accidents have been reported from its use during operations, especially on the eye, but the same might have occurred during the same operations under ether, indeed they often so occur. More accidents will occur at the hands of careless operators.

10. We have observed a tendency to corneal inflammation, as well as conjunctival in certain cases, deficient in general vitality. This is not to be wondered at when it is remembered that the cocaine diminishes the calibre of the blood-vessels supplying these parts. Perhaps the increased protection of the eye from external irritants after the exhibition of the cocaine will avoid this result.

Our own personal experience in the use of this drug for surgical or medicinal purposes has been most satisfactory, and our appreciation of its value increases daily. The only difficulty in the study of its clinical uses and limitations is its expense. But as the demand has become great and bids fair to be permanent, more extensive measures will be taken to produce it at a less cost, so that soon it will be within the reach of all.

Dr. Knapp will publish a book soon giving a full study of the clinical uses, etc., of this drug.

The *Chicago Pharmacist* has passed into the hands of Prof. Oscar Oldberg.

Lawson Tait's American Notes.

The great apostle of abdominal surgery, the surgical genius of Birmingham, Eng., visited Canada and America last fall. On his return he wrote a paper and read it before the medical society of Birmingham, in which he gave expression to some of the impressions made upon him by his visit.

From this we take a few thoughts. Everywhere he was treated right royally, and this he most emphatically acknowledges. He says:

"On the great western continent there is an enthusiasm, a vivid interest in life, a regular go-aheadness, of which it would be well if we had a stronger infusion. The general summary of my visit to the United States and Canada may be briefly put in the statement that no Englishman can obtain a reasonably full grasp of how the world is moving, or of the numerous phases of life, medical and surgical, as well as others, until he has seen life across the Atlantic."

The number of doctors and their social position struck him thus:

"In England we have about one doctor to fourteen hundred people; in Canada it seems to be about one to eight hundred, and in the States it seems to be about one in six to seven hundred; and yet they seem to be better paid, to be less hardly worked, to be more prosperous and successful than we are here, and to be in a much better social position than we can boast of. This latter fact especially struck me and it was proved to me in a variety of ways. But perhaps I cannot give this impression more clearly than by taking an extract from a Boston physician recorded at the time of the opening of the new Harvard building. He gives his impression as it were from the other side, and certainly there is a singular concurrence in our experiences. "Dining," he says, "with two Englishmen a few years since—one an Oxford professor, the other a brother of a lord—I was surprised to hear their views on the social standing of the medical profession, and could not help contrasting their position here, where if all are not autocrats, they are all constitutional, and some of them hereditary monarchs, accompanied by honor, love, obedience and troops of friends."

Concerning the British diploma he says: "Those students rejected by the Canadian State Examining Board are very much in the habit of running over to Great Britain and speedily returning to their native province

armed with a parchment granted by one or other of three well-known corporations in this country, all of whom for the present shall be nameless. As British qualifications these diplomas are allowed to override the decision of the State Examining Board, and the mischief which we might well confine to our own borders, is carried across the Atlantic. The complaints on this subject are long and loud and frequent, and they add another to the many strong arguments which we are at present urging in favor of reform in medical education."

Of the state of antiseptic surgery in America he found the greatest difference of opinion and practice. Many American surgeons operate under a spray of a weak solution of corrosive sublimate. But they do not agree as to the strength of the solution or the completeness of its use. "One distinguished surgeon told me that he was now quite satisfied with sponging the wound over after the completion of the operation, with a one to one thousand solution of corrosive sublimate. He says that he gets quite as good results as he did when he used the cumbersome, expensive and troublesome method involved in the use of carbolic spray. Of the remarks of individual surgeons I was most impressed with the statement of a professor of surgery of more than 30 years' standing, a man of enormous experience, and attached to one of the largest hospitals I visited, who told me his deliberate conviction had at length been formed that the so-called antiseptic system of surgery had little to commend it, save that of being a very successful system of quackery. He put it in this way: 'If from time to time in every few months, the methods are changed and with each succeeding change strong statements are made that the last development contains the only security, it must inevitably follow that to the public mind there can be security only in the hands of the inventor himself, for the complete and successful accomplishment of details.' Others must be in the shade; for whilst they are following the methods which Sir Joseph Lyster himself has by this time discovered to be useless, he himself is on a new road, in which success for the time at least is secured."

He concludes his observation thus: "I can say that if anyone here requires to be persuaded that the Anglo-Saxon race and the Anglo-Saxon tongue are destined to be in the future, as they have been in the past, the dominant influence in the world, he must do

as I have done, and put it within his power to write a similar rambling tissue of American notes.

Cerebral Localization, and Brain Surgery.

Among the most important studies of this century in the medical world have been those relating to the localization of brain diseases. This has come about mainly by experiments made upon animals. The opening of the cranial cavity is an old operation. But formerly it was impossible to tell before hand what would be found. Hence, except to raise depressed bone due to traumatism, there was little science in these operations, and it does not appear that they usually resulted in good other than in giving the surgeon operating experience. However, as it became possible, from the new physiological studies alluded to, to locate with exactness brain lesions, a way was opened for a scientific brain surgery greatly in advance of that of former years.

Dr. Macewen, of Glasgow, has within the past few years twice successfully removed cerebral growths, the location of which had been previously diagnosed by using the localization doctrines established during the past few years. The *London Times*, besides giving these, reports other cases in which the same doctrines have been employed to locate cerebral abscesses, effusions of blood, etc., which the same surgeon had successfully treated by operation.

Broca in 1871, and Lucas-Champonniere in 1874, successfully applied the same doctrines to diagnose cerebral injuries, etc., preparatory to operations.

Lately Dr. Hughes Bennett (*Med. Times and Gazette*) reports a case in which he diagnosed a tumor of the cerebrum, accurately located it and asked Dr. Godlee to operate for its removal. This was successfully done, the tumor being found where Dr. Bennett located it. The case progressed favorably for several days but finally died.

Dr. Bennett's reasons for locating the tumor at the upper third of the fissure of Rolando were (1) Paroxysmal twitchings of the left side of the face, alternating with twitchings of the arm on the same side, followed by slowly progressive paralysis of the hand and later on by twitchings of the eyelids and leg without paralysis. (2) Double optic neuritis. (3) Violent headache. From this evidence the trouble was decided to be a tumor located at the upper third of the fissure of Rolando and probably not larger than a

walnut. When the skull was trephined over this spot the convolution beneath appeared healthy. But an incision made into the ascending frontal convolution revealed a quarter of an inch below the surface a tumor the size that was diagnosed. This was readily removed. The strictest antiseptic precautions were observed. Though this case died, it has demonstrated the possibility of making accurate diagnoses of brain tumors. It is quite as probable that ultimately as great successes will be achieved in brain surgery as in abdominal surgery. Goodlee is not termed a butcher as were the first operators for ovarian tumors. The best conditions for brain operations will gradually be ascertained, and then success will be the rule, as in abdominal tumors.

The Encouragement of Dissection by the Medical Profession.

As a rule, it may be said that medical men never dissect after graduation, and, if the truth must be told, very many do little if any real dissection before or after. The result is an astonishing amount of ignorance upon the anatomical points, which can only be learned by actual dissection. A few medical teachers and a few active surgeons form the exceptions to the foregoing statements. It is also true that oftentimes the students are not to blame for their non-acquaintance with dissections, because their alma mater has no subjects for them to dissect, or such poor ones that nothing can be learned. After graduation it is almost impossible to get a chance to dissect, unless one has some intimate connection with the medical college. The simple truth is that before and after graduation it is both difficult and very expensive to get subjects to dissect. In many states there are anatomical laws which do something to correct these defects. The best we have seen is the law of Pennsylvania. This law calls for the formation of a State Anatomical Board, including the professors of anatomy and demonstrators, professors of surgery of all incorporated medical and dental schools, and one representative from every such private school.

1. This board distributes to each school in proportion to the number of students in its anatomical and surgical classes, all unclaimed and unknown bodies, which otherwise would be buried at public expense.

2. Each school makes a periodical report

to the board of the number of its students as the basis of distribution.

3. In each county of the state unclaimed bodies may be delivered through the board to any physician in the county who complies with the provision of the Act in filing a proper bond. Thus legalized dissection can be carried on by any practitioner in his own home. The doctor is no longer compelled to dissect surreptitiously or go to a medical school.

4. All bodies not needed in each county by the physicians of the county are at the expense of the board forwarded to one of the medical schools.

The law has been in operation but little over a year. The *Medical News*, from which our facts are taken, says that its influence on dissection has been beneficial in all respects. Of course it calls for a complicated machinery which takes a considerable time to get in running order. It must encourage dissection by individual physicians. There is no longer in that state any excuse for each physician failing to dissect one subject yearly. By the combination of four physicians in dissecting one subject or operating on the same, subjects can be kept quite fresh and the expense of rooms, etc., will be reduced to a minimum. Every village can now have its dissecting room, as well as its poor house. The latter can furnish supplies for the former, and still leave plenty of subjects for all the medical schools. We could wish that an equally good anatomy act were in operation in Michigan and all other states. If the general medical profession would only see its opportunity, the thing would be done. A society to promote the practical study of anatomy might be a power for infinite good to the medical profession by promoting the practical operation of such laws as the one we have called attention to.

Report of the English Cholera Commission.

The *Medical Times and Gazette* for January 3, 1885, gives the text of the preliminary report of Drs. E. Klein and H. Gibbes, to the Surgeon-General and Sanitary Commissioner with the Indian Government.

The investigations carried on at Bombay and Calcutta have reached the following results:

1. The statement of Koch that "comma-bacilli" are present only in the intestines of persons suffering from or dead of cholera is not in accordance with the facts, since "comma bacilli" occur also in other diseases of

the intestines, *e. g.*, epidemic diarrhoea, dysentery and in intestinal catarrh associated with phthisis.

2. The "comma bacilli" in acute typical cases of cholera are by no means present in such numbers and such frequency as to justify Koch's statement that "the ilium contains almost pure cultivation of comma bacilli."

3. The "comma bacilli" are not present in the tissue of the intestine or elsewhere.

4. The "comma bacilli" in artificial cultivations carried on by one of us (E. K.) do not behave in any way differently from other putrefactive organisms.

5. Mucous flakes of the ilium taken out soon after death from typical acute cholera, contain numerous mucous corpuscles, many of them filled with peculiar minute straight bacilli. The same bacilli occur outside the mucous corpuscles. They are never missed even when the comma bacilli are.

6. These small bacilli have been cultivated by one of us (E. K.) and they do not behave differently from putrefactive organisms. These small bacilli are not present in the tissues of the intestine or any other tissue.

7. No bacteria of any kind, and no organisms of known form and character, occur in the blood or any other tissue.

8. A good many experiments have been carried out by one of us (E. K.) with the following results: (a) Mice, rats, cats, and monkeys were fed with rice-water stools, with vomit, with mucous flakes of the ilium, fresh and after having been kept for 24 to 48 hours. The animals remained normal. (b) Inoculations with recent and old cultivations of "comma bacilli," and the small straight bacilli, as well as mucous flakes, were made into the subcutaneous tissue, into the peritoneal cavity, into the jugular vein and into the cavity of the small intestines and large intestines of rabbits, cats, and monkeys; but the animals remained perfectly well and normal.

9. The material which we have hitherto had at our disposal has been very good and abundant, and so far as the microscopic work goes, we do not think we shall require any more material.

From the report it does not appear that the relation of the "comma bacillus" to cholera is a definite and causative one. Of course Koch and his followers will attack these conclusions, and after demolishing them again set up their own results showing that the "comma bacillus" is the cause of cholera. Meantime we shall patiently watch for ultimate results.

Lo Must the Poor Negro Go?

It has been a frequent lament that with the advancement of European civilization upon the American continent, the poor Indian has gradually died out. But with almost equal frequency it has been stated that the negro race was of superior vitality, and he would yearly increase so as to at last enter upon the occupation, by himself, of large portions of the southern states.

But in the *Sanitarian* for Dec. '85, Dr. J. N. Upshur tries to show that the negro race is actually dying out. He writes from Richmond, Va., and apparently his personal observations have been made at this place. He says that as the period from the old slavery days lengthens, the negro becomes increasingly delicate. He is less comfortably sheltered, clothed and fed. His improvidence and natural shiftlessness leave very many of the race unprovided for the cold of winter. As a result of these and other causes, he is gradually losing his vitality, and falls a ready prey to phthisis, cancer and syphilis. He is also losing his power to resist disease, and does not so readily respond to the action of remedies. For 1882 the rate of the mortality of the whites of Richmond was nineteen and eight-tenths per thousand; while that of the blacks was thirty-seven and eighty-nine one-hundredths per thousand. The number of the births was much less relatively among the blacks than among the whites. The number of still born among the blacks was double that among the whites. Thus it is shown that the negroes are deficient in reproductive power, and die sooner and in greater proportion than the whites. He concludes thus:

"We wish our sable friends well, and would rejoice to see them prosperous and happy in their proper station. But much thought and close observation for many years, force upon us the belief that in time, a few generations at the farthest, the place that now knows the colored man will know him again no more forever. The hand of fate is upon him; and while the ultimate result may be retarded by an improved hygiene, yet there lurks in his frame, the seeds of disease, enfeebling his constitution and diminishing his resistance to disease, till feeble and blighted, he will cease to be, except as a memory of the past." Do wider observations than those of this writer support the conclusions he has drawn from Richmond? Are we to expect the fading away of the entire colored race?

How Professors Are Made.

The number of professors in any large community is something wonderful. The classes of people who are grouped under this classic title are numerous. Some persons buy their professorships. Others earn their professional titles. Not a few steal the same. A very considerable number pick them up as they would an old hat in the street. Of the great mass, no one can tell how they became professors.

As an illustration of one of the methods of getting the title of "professor," the *Medical Times* gives a capital illustration from the Quaker city. "A man in the northern part of the city died while under the care of a "professor" who makes and sells his own medicine. The widow called upon the professor for a death certificate, when she learned for the first time that he was not a doctor and not entitled to sign a certificate. He was afterward brought up to answer to a charge of malpractice, when he explained that he was formerly a real estate agent, had no medical education, and did not know that the law could prevent him from making and selling a medicine which he knew was good because it had cured him. The title of "professor" he had adopted because he professed to make and sell medicine; he also had been in the habit of attending the sick when requested to do so."

Thus this man became a professor because he professed to make and sell medicine. The good natured laity look upon this state of things mostly with indifference. One professor is about as good as another, and all are made to suffer from the cheapness with which the title is acquired and held. The medical profession in so far as the matter is one relating to their professional interests, look upon it as one of the evils which cannot be cured and so must be endured. But year by year the title of professor suffers by littleness of knowledge and power that it generally represents. In this it follows the same law as the term "doctor." In each calling the learned, the skillful, the real teachers, the noble men are held down by the rabble of ignorant, unskillful, false teachers and ignoble men. Here, as elsewhere the "wheat and tares grow together till the harvest."

A correspondent of the *St. Louis Courier of Medicine* says that a medical student can live in Vienna and study medicine for about \$2,000 a year. Modest allowance?

The Power of Ladies to Cause the Removal of Nuisances.

Last year Dr. C. F. Chandler was removed from the presidency of the New York City Board of Health. It seems that he insisted on looking out for the sanitary condition of the city. This did not suit the ruling powers. Hence he was given indefinite leave of absence. Among other results which followed, manure dumping grounds were permitted to remain within the city, producing not only discomfort, but sickness and suffering and death. The Board of Health did not remove them. Being appealed to to exert its power in causing their removal, it confessed its inability to do so. At last the ladies took hold of the matter, appealed to the grand jury and had the contractors fined and the manure dump removed. Finally they secured an official censure of the Board of Health. Thus it appears that the New York City Board of Health is under the influence of politics, of the worst sort, viz: money, bribery and intimidation. It is to be hoped that the ladies will not let the matter drop until an honest board is put in power. Only thus can the measures be taken which are needful to protect New York against cholera next summer.

Memoranda.

Illinois has one physician for every 523 people.

Prof. Vierordt, the great physiologist, died Nov. 22d, aged 67.

Bones of bears of the glacial period found at Gibraltar exhibit osteo-arthritis lesions.

The latest mode of classifying births is to call them bowel complaints. So a writer from India says.

Mr. Eber Caudwell took eight grains of hydrochlorate of cocaine without experiencing any serious symptoms.

Dr. Hammond's second novel, "Doctor Grattan," has appeared. His "Lal" is being prepared for representation on the stage.

The Putnams announce a work on cocaine in its relations to surgery, by Dr. Knapp, and a work on Acne by L. Duncan Bulkley, M.D.

M. Coestu, of Paris, reports two hundred and ninety eight cases of diphtheria treated by large doses of calomel, and only twelve deaths.

Dr. Rudolph Tauszky, an expert in insanity cases, tried to kill his wife, and afterwards fired a ball at his own head. All admit he is insane.

Thirteen deaths from chloroform were reported in England during 1883 and none from ether. Yet ether was more extensively used than ever before.

A Frenchman has discovered that three times as many unmarried as married men are attacked with cholera. Is marriage a preventive of cholera?

In eye diseases dependent on whiskey and tobacco Dr. Marshall (*Louisville Med. News*) has obtained excellent results from the administration of coca.

The *Union Medical* says that on October 15th, 1884, 3,994 students were registered at the Paris School of Medicine. There were seventy-eight lady students.

The New York Dispensary now pays its staff \$800 a year, requiring of them four hours work each daily. They are to be appointed by competitive examination.

Dr. F. W. Smith in the *Medical Record* reports that a patient of his, a woman, swallowed a shawl-pin four and one half inches long. After three days it passed the rectum, safely.

The Italian Government proposes to spend some twenty millions of dollars in improving the sanitary condition of Naples. As the horse is stolen it proposes to lock the barn door.

Bicycle riding leads to early impotence, so says Dr. S. A. Strahan, in the *London Lancet*. It tends far more rapidly than horseback riding to the production of the "disease of the Scythians."

Of Sim's speculum Emmet says, "In a single generation the use of this instrument has advanced the knowledge and treatment of the diseases of women from profound ignorance to the front rank."

Chairs of bacteriology have been established in Munich and in Wiesbaden. Numerous bacteriological laboratories have been organized in connection with the clinics of many universities on the continent.

It is suggested that siphons be charged with oxygen instead of carbonic acid. Water, lemonade, and numerous other liquids could be advantageously used as a medium for administering oxygen internally.

A spaniard after gazing at the facade of London University, pointed to the statue of Harvey and remarked to a friend, "Just like you practical Englishmen, to erect a statue to a man because he invented a sauce."

The *Boston Medical Journal* says that it will use the telegraph should occasion occur when it could thus furnish information of genuine value to its readers, but "electricity will not be resorted to merely as a means of display."

On December 22d Dr. Brandelis left the New York Ophthalmic and Aural Institute, after his daily duties, and has not since been heard from, to date of writing. Insanity or foul play are the only reasons suggested for his sudden disappearance.

One of the members of the Committee on Organization of the International Medical Congress of 1887, took cold on his way to Washington to attend a late meeting, followed by pneumonia, and died. This is victim No. 1 of the coming Congress.

The Chief Justice of Georgia has decided that S. S. S. is a very valuable remedy for cutaneous diseases, and an invigorating tonic. How learned the Bench of Georgia! Thus do the legal profession lend aid and comfort to honest scientific medicine!!

Dr. Forrest in the *Medical News* reports excellent results in a severe case of dysmenorrhea from the hypodermic administration of five minims of a 4 percent. solution of cocaine. Complete relief was afforded for five hours, and comfort for a much longer time.

Emmet says that before passing the uterine probe the physician should be thoroughly satisfied that neither pregnancy or cellulitis exists. The overlooking of either of these conditions is culpable, and entails serious, often life-long injury upon the woman.

The *Boston Med. Jour.* thinks that "the great good of the whole code controversy has been the formation of the New York State Medical Association, which does really valuable work to the neglect of wire pulling and pipe laying for public popularity."

Butler's Physician's Daily Pocket Record has been received. Having reached its 19th year, it is more firmly than ever entrenched in the regard of such of the medical profession as have put it to the test of actual use. It is handsome, accurate and convenient.

In New York city, says Prof. Felix Adler,

member of the Tenement House Commission, the fear of the landlords prevents the authorities from doing aught to purify the pestilential districts. The landlords are to be feared because they wield powerful political influences.

Dr. A. H. Bennett says that "the physician will raise his calling in the eyes of the world, according as he respects his profession, and treats his colleagues with courtesy and forbearance. As his relations with the public are dignified and honorable, so will he elevate himself above the adventurer and charlatan."

The *Boston Medical Journal* says that Dr. O. S. Taylor, of Auburn, N. Y., graduated at Dartmouth in 1809, from the Medical Department of the same college in 1813. So far as is reported he is the oldest living graduate of an American medical college. He celebrated his 100th year December 17, 1884. Long may he live.

The Baltimore Medical College has succeeded in splitting itself in twain. One part retains the old name and the other assumes the name of "Baltimore University." Pity both had not retired to private life, as Baltimore has already too many colleges, for their quality. Better have one well endowed medical school than all put together.

The first number of the *Annals of Surgery* has appeared. It is edited by Dr. L. S. Pilcher, of Brooklyn, N. Y., and Dr. C. B. Keetley, of London, Eng. It contains 96 pages, is issued monthly, at \$5.00 a year. It is well published by J. H. Chambers, of St. Louis, Mo. It is the successor of the *Annals of Anatomy and Surgery* published for several years in Brooklyn, N. Y.

As in West Virginia, and Illinois, the medical law of Missouri has been sustained by the supreme court of Missouri. Hence, so far as state supreme court decisions can settle the question, the quacks must keep out of the hands of the law if they desire to pursue their trade in those states. The law is against quackery. Would that the people were equally against it.

The *Annals of Surgery* says that one outcome of the antiseptic method of surgery, is that it has given a safe footing on what was formerly perilous ground, and all over the French Empire men, who a few years since dreaded to perform an operation, now have become successful surgeons. All the surgical

cases do not now go to the great Paris surgeons. Most are treated at the smaller towns.

While discussing vaginal examination, Emmet says that "a patient once informed him that she had refused to submit to an examination because she noticed that the physician whom she consulted did not keep his finger nails clean. This circumstance convinced her that, if he was so negligent of his own person, he would be quite as likely to neglect the details of her case." A dirty doctor should be repudiated by all patients.

There are now four plans for reducing obesity. 1. The eating of nothing containing starch, sugar or fat, called the Banting system. 2. The eating of fat but not sugar or starch, called the German Banting. 3. The clothing in wool and sleeping in flannel blankets instead of sheets, the Munich system. 4. Not eating and drinking at the same time, or rather with a couple of hours between the eating and the drinking. Schweninger system.

Dr. George F. Atkinson, of Brooklyn, N. Y., became infected with syphilis while operating on a patient last August. The disease took on a malignant form, finally attacking his brain, and causing death. He was a lecturer on genital diseases in the Long Island Hospital Medical College. Such is one of the risks of a doctor's calling. The number of doctors who fall victims to this disease in this manner is larger than most realize.

Mr. Lawson Tait has made one thousand abdominal sections with only ninety-three deaths. He thinks that he can do even better than this if he is able to complete a second thousand of such cases. He assigns as reasons for his good results, increased by experience, the discarding of the clamp in ovariotomy, and of the ligature in hysterectomy, and the earlier performance of all operations. His recorded work marks a brilliant surgical achievement.

A correspondent of the *Medical News* says that in New York the poor and even middle classes get good medical and surgical advice at the dispensaries free. Since the two post graduate schools have been established, there is a dearth of clinical material. Hence it is common for interesting cases to go round and hire themselves out to the various clinics at from twenty-five cents to two dollars per lecture. If the matter continues, a rare case will be a fortune to its possessor.

The late Dr. F. A. Mahomed took the scarlet fever from a post mortem examination to his wife, who had recently been confined, so that she died. He himself, the physician to the London Fever Hospital, died recently of enteric fever. He was a man of unusual promise. In him the proverb may be applied: "the good die young." He was only 36, and and yet his labors and researches, respecting the physiology and pathology of the arteries, had already made for him a world wide reputation.

Dr. T. A. Reamy reports a case in which death ensued from the hypodermic administration of a quarter of a grain of morphine. The smallest dose reported to have caused death is a sixth of a grain. In a case in his own experience coma was induced by the hypodermic injection of almost pure water, a mere trifle of the morphine being contained in the solution. Thus it appears that it is impossible to say what will be the result of even so simple a thing as the hypodermic administration of morphine.

The *Medical Times* correspondent says the people of Louisville, Ky., do not expect anything from their health officer, and pay him two thousand dollars a year for this purpose. He fully meets their wishes, drawing his salary with admirable promptness, and leaving them to revel in their filth. Some communities are easily satisfied. The Louisville medical schools are said to have fewer students than usual. Referring to the controversy between Dr. Yandell and Dr. Galt, he says it is believed that the statements of both gentlemen were generally correct. This being admitted, it seemed clear that both the schools of Louisville need reorganization.

The *Medical and Surgical Reporter* is opposed to capital punishment. It says, "We can conceive of no right to kill a man because he has killed another." The writer of this was never a cow boy. In Michigan there is no such thing as capital punishment. Murders are apparently more frequent here than in States that have capital punishment. The fact is most murderers go free. Those who happen to be caught, are generally set free by juries. If perchance one should be sent to the State prison, he is speedily pardoned, to repeat his murder. This state of things does not seem very satisfactory to large numbers of thoughtful men. How shall it be remedied?

A correspondent of the *Medical Record* says that the operation for gastrotomy is so common that few care to witness even Billroth's operations for gastrotomy. He then describes a case of a man about forty-two years old, in fair health, well nourished, who walked into Billroth's clinic room. Billroth said it was a case of simple ulcer of the stomach which had contracted till it caused serious obstruction at the pyloric orifice. He proposed to cut down and remove the cicatrized portion. He did cut down but finding extensive carcinomatous infiltration, made a new connection between the pylorus and the stomach. The patient died of shock eight hours after the operation. Experts sometimes fail in making correct diagnoses.

Age and high professional and social position do not protect their possessors always. So Dr. Fordyce Barker, of New York, has lately ascertained. It seems that he was charged before the New York Academy of Medicine with claiming to be a graduate of the Paris Medical School. The matter was referred to a committee. This report affirmed that he did graduate, but under quite unusual circumstances. The unusual circumstances doubtless misled his accusers. But he now stands in his old place of honor before the medical profession, as a man of truth. It will be wise for his opponents to be sure they are right before they make similar attacks upon medical men. The whole affair is most unfortunate.

Speaking of the differences between physicians in making vaginal examinations Emmet says, "One will proceed with as much vigor as if he were boring a hole, and find little more than the cervix, which feels like an obstruction in his way. He gains no information of importance, and inflicts unnecessary pain on the patient. Another in less time will pass his finger lightly over every portion of the vagina, and quickly ascertain enough to enable him to fully understand the case, without having caused any pain. The manner in which I have sometimes seen this examination made even by men of experience can be described only as brutal; the amount of suffering they needlessly inflict, and the want of tact evinced by them, ought to debar them from the practice of any branch of the profession."

The reckless selling of deadly poisons calls for attention from the hands of those who

have an interest in the public health. The *British Medical Journal* says that the annual mortality from patent medicine alone, as shown by statistics, is over one hundred and fifty thousand in Great Britain. As an illustration of the reckless selling of poisons, it gives the case of an insane lady, who purchased four bottles of Collis Browne's chlorodyne in the course of four days. With this she committed suicide. The chemists who sold it admitted that they knew the chlorodyne contained morphine, chloroform, Indian hemp and prussic acid, but they did not consider it a poison because it was a patent medicine. If this is a general impression, patent medicines had better be abolished at once. We have no doubt that if the actual composition of each patent medicine was printed on the outside of the package containing it, the amount consumed would be reduced three-fourths. Certainly such cases as we have quoted would become less frequent.

The *Medical and Surgical Reporter* says that in New York and Philadelphia there has been a rapid introduction of opium smoking during the past five years. The late Dr. Kane, of opium notoriety, affirmed that in most large cities of the United States opium smoking was common. At that time we made an investigation of Detroit, but we could find no evidence that a single "joint" existed. It is possible that they have been introduced since. There is no reason why the drunkard, the devotees of various forms of narcotic poisoning, should not resort to this one. The "joint" has one recommendation, it provides for the protection of those whom it intoxicates, till they are sober. Unlike the saloonist, when the keeper of a "joint" has made a person incapable of walking, he furnishes him a bed, or bunk, in which he can lie till the effects of opium have passed away. But, like all other kinds of narcotic indulgence, opium smoking takes hold on hell—mental hell, moral hell, and physical hell. The career of the Dr. Kane already alluded to is a melancholy instance of the effects of this habit.

The *Medical Record* calls attention to the fact that any efforts to change the public health management of the United States will meet the hostility of the treasury department through the chief of the Marine Hospital Service. This is the source of the influences which destroyed the old National Board of

Health, and which will defeat all proper health legislation during the present session. This being admitted, those who desire other legislation, such as was proposed by the late health convention, must be prepared to encounter and overcome the opposition which a bureau, already in possession by artful intrigues of the funds and power belonging to the existing board, can wield through the treasury department. It looks to us as if all efforts at present to establish a different system of national health legislation are doomed to disappointment. After the fourth of March a change will occur in the head of the treasury department, and possibly a change may be effected in the national health management. There should be an independent national health department. Obstacles to its existence must be removed. How long this will require depends much upon the political influences which the advocates of this change can bring to bear upon congress and the executives.

Dr. F. V. Davis, ex-U. S. army, in the *Med. News*, tells the following observation: While practicing in Pentonville, Eng., he was called at about midnight to see a case quite unique. The gentleman calling him said that at bed time, as he went into the back kitchen to see if the house was shut up, he was attracted by a noise in the coachman's room. On going there he found the coachman in bed with one of the maids. She screamed, he struggled, and they rolled out of bed together and made frantic efforts to get apart, but without success. He was a big, burly fellow, over six feet high, and she was a small woman of not more than ninety pounds. She was moaning and screaming and seemed in great agony, so that after several fruitless attempts to get them apart, the doctor was sent for. When he arrived, the man was standing up, supporting the woman in his arms, the penis being locked in her vagina. After trying to liberate the penis by water and ice, and failing, chloroform was sent for. A few whiffs of this put the woman to sleep, and released the penis. This was swollen, livid, and in a state of semi-erection, which did not go down for several hours, and for days the organ was very sore. It must have been that there was a spasm of the sphincter at the orifice of the vagina, which nipped the penis, and prevented the outflow of blood from the organ.

Editor's Book Table.

The International Encyclopædia of Surgery— Fifth Volume.*

This volume is devoted to the consideration of regional surgery. The regions included are, briefly, the head, neck and abdomen.

The several articles embrace injuries of the head, of the eyes, the ears, the nose, face cheek and lips; the mouth, fauces, tongue, palate, and jaws; the surgery of the teeth; injuries and diseases of the abdomen and hernia.

The article on injuries of the head is from the pen of Dr. Chas. B. Nancrede; that on malformations and diseases of the head is by Dr. Frederick Treves, of London; that on injuries and diseases of the eyes and their appendages, by Dr. F. Williams, of Cincinnati, O.; that on diseases and injuries of the ear by Dr. A. H. Buck, of New York; that on diseases and injuries of the nose and its accessory sinuses by Dr. Geo. M. Lefferts, of New York; that on diseases and injuries of the face, cheeks and lips by Dr. Alfred Post, of New York; that on diseases and injuries of the mouth, fauces, tongue, palate, and jaws, by Dr. Christopher Heath, of London; that on the surgery of the teeth and adjacent parts by Dr. Norman W. Kingsley; that on injuries and diseases of the neck by Dr. George H. B. MacLeod; that on diseases and injuries of the air passages by Dr. J. Solis Cohen, of Philadelphia; that on injuries of the chest by Dr. F. H. Bennett, of Dublin; that on diseases of the breast by Dr. Thomas Annandale, of Edinburgh; that on diseases and injuries of the abdomen by Henry Morris, of London; that on hernia by Dr. John Wood, of London.

It is impossible to review this book in the space at our disposal. After a quite careful examination of it we are inclined to the belief that it is the best of the volumes thus far published. The articles on the special senses are simply admirable. That on diseases of the eye for the first time brings into

*THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY, A Systematic Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by John Ashhurst, jr., M. D. Illustrated with chromo-lithographs and wood cuts. In six volumes. Vol V.

New York: William Wood & Company. 1884. Cloth, pp. 1,207.

For sale by John MacFarlane, Detroit. Price, cloth, \$5.00 per vol.

a lengthy publication the veteran ophthalmologist of the west, Dr. F. Williams, of Cincinnati. His article is characteristic of his intense individuality, clear, practical, full of suggestion, abreast with the best eye work of the time. It is unusually interesting reading for a treatise upon the eye. Each of the other articles on the special senses is practically a treatise upon the subject discussed. Specialists as well as general practitioners will be interested in the reading of these. We venture to note one passage from Williams as giving his style and manner of thought etc. It occurs in his account of injuries to the eye, and has reference to the diagnosis of wounds of the ball:

"Discovered the seat of the wound, has it penetrated? If the iris is drawn into it by the escape of aqueous humor, forming a hernia, ever so small, yes. If the chamber has its relations altered—that is if the iris is near or in contact with the cornea, whether prolapsed or not—yes. If there is blood in the chamber, much or little, without the possibility of a severe concussion of the eye, with or without unnatural softness of the ball to the touch, yes. If a small hole is seen in the iris corresponding in size to the corneal wound, and in the probable direction of the penetrating body with or without blood in the chamber, or alteration of the depth of the chamber, yes. If the foreign body can be certainly seen in the iris, lens, or capsule, yes. All of these symptoms failing in a case of a manifest wound of the cornea, you dilate the pupil and use the ophthalmoscope. If the fundus of the eye be darkened by blood, the circumstances precluding rupture of the intra-ocular vessels, there is almost certainly penetration. If the foreign body can be certainly seen within the organ,—in the chamber, iris, lens, vitreous or retina—the diagnosis is sure. Of course impairment of sight and the appearance of a cloud in the field of vision, caused by extravasated blood or the foreign body, or both, come in as corroborative evidence of penetration. The sight may be destroyed at once or very soon; or it may be very little affected, according to the size, direction and final resting place of the offending body. The value of the softness of the globe, as evidence of penetration is very great, when it certainly is present. But the tension is often unaltered. If the foreign body is small it may pass deeply into the eye without any escape of humor either aqueous or vitreous, and hence may leave the tension normal."

This section of this subject is a masterly example of diagnostic skill.

Since it is deemed desirable to discuss these specialties in works on general surgery, we are glad that they are presented with such fullness and correctness as to prove helpful to such as may look here for aid in the care of such cases.

The illustrations fall below the standard that we would like to see aimed at. They teach the lessons desired with sufficient accuracy, but they are far from artistic, as would be becoming in a work of the size and scope of this.

There is no doubt that this volume will add to the satisfaction which subscribers to this work feel in its possession, and will increase materially the number of subscribers to the entire set.

Emmet's Principles and Practice of Gynecology.—Third Edition.*

It is not much to say that the author of this work has created a school of gynecology. From the Woman's Hospital, of New York City, have gone forth men into every part of the country to practice and teach the principles and methods taught them by Emmet. Many new operations and plans of treatment of women's diseases have had their origin in the same brain. Through the successive editions of the work before us, he has still farther stamped his originality upon the medical profession. It is doubtful whether there is a living gynecologist whose dicta are so frequently quoted, and whose suggestions are so generally adopted by the most intelligent practitioners, as those of Emmet. Former editions of this work have had a large sale, but this will surpass them all. The book is not so much prepared for medical students as for medical practitioners. These latter, rather than the former, have ever surrounded Dr. L. Emmet, and to them he has ever directed his teachings. Hence the natural bent of his written work.

To such as know Emmet, it will be needless to say that this new edition is really such, from preface to index. All he puts his hand to is thoroughly done. Much that the last edition contained has been omitted, and a great deal of new matter added. Among the chapters which are nearly new, are: the relation of

* THE PRINCIPLES AND PRACTICE OF GYNECOLOGY. By Dr. Thomas Addis Emmet, M. D., LL. D., Philadelphia. Henry C. Lea's Son & Co. 1884. pp. 876. Sheep. For sale by Phillips & Hunt, Detroit, Mich.

education and social condition to development; pelvic cellulitis; disease of the ovary; ovariectomy; and, stone in the bladder. The following subjects have been greatly changed in the chapters discussing them: prolapse of the vaginal walls; lacerations of the vaginal outlet and through the sphincter ani and perineum; methods of partial and complete removal of the uterus for malignant disease; surgical treatment of fibroid tumors; diseases of the fallopian tubes; diseases of the urethra. These chapters contain much that is new, and has not been before presented to the profession. The author brings forward all his influence to introduce the abandonment of intra-uterine medication as not having a sound pathological basis, and to induce the profession to recognize the different forms and shades of pelvic inflammation outside of the uterus, now generally overlooked, as forming the chief factor in the diseases of women. He says we shall have made a great advance in solving the problem as to the true pathology of many supposed uterine diseases when we seek for the cause outside the uterine limits. He thinks that in this respect cause has been confounded with effect. Inflammation of the neighboring connective tissue of the pelvic veins and lymphatics, and the mechanical effects of new growths not directly connected with the uterus, have indirectly brought about changes in the uterus which we have treated as the primary disease. After calling attention to the vascularity of the tissues in the pelvis, he shows that a continued over-distension of these is likely to result in some disease. The simplest of these diseases is hypertrophy. In its simplest form this is seen in a woman who has never been impregnated. Here it exists as a protest on the part of nature against the non-exercise of the true function of the uterus. Few women reach the age of thirty-five without suffering more or less from this condition, whenever the function of nutrition becomes impaired from nervous disturbance. If nutrition improves, this condition disappears and the system becomes reconciled to the state of celibacy. If the equilibrium is not established, some permanent uterine disease is likely to be set up, generally in the form of a fibrous tumor. The same results follow in many cases of sterility, from whatever cause. Habitual constipation and errors of dress are also frequent causes of congestive hypertrophy of the uterus. The obstruction, at first mechanical, finally ends in a permanent change in the tissues.

The development of new growths from a loss of the normal balance between waste and repair is shown in comparison between the sterile and fertile uterus. In the fertile uterus this balance is rarely lost, and fibroid tumors rarely appear. In the non-sterile uterus they are not infrequent. It would appear that sexual intercourse has a controlling influence upon the development of these growths, limiting the size and number.

But is there no escape for the unmarried females from this result? Yes. If the nervous energy normally expended here, be diverted to and expended in other channels by a steady occupation of body and mind, the uterus is likely to escape the penalties of celibacy. Thus, a servant girl, if well fed and protected from the effects of exposure, is far less liable to have a fibrous tumor, than a woman who has fewer opportunities to expend her surplus nervous energy.

On the other hand, the woman who has had all her surplus energies taken up by the bearing and rearing of children, is much more liable to the development of some form of malignant disease on the occurrence of a change of life.

Epithelioma is found in the woman who has been unusually healthy, and has given birth to a number of children beyond the average. Emmet says he has never seen a case of this disease in the sterile or unmarried. He thinks that this disease results from some local irritation, set up in consequence of injury resulting from child-birth, most likely to laceration of the cervix. The hysterical manifestations of a disordered nervous system are common in the unfortunate woman who has had her brain developed and over-taxed at the expense of her organs of generation; in those who give themselves over to idleness and luxury; in the victims of sentiment and romance; and in an aggravated form in those in whom that sheet-anchor of womanhood is wanting, viz.: a devotion to duty, and a healthy sense of moral obligation. The woman who has been trained to hold her emotions under a proper degree of discipline, and in whom they have been held in check by a healthy occupation of body and mind, does not necessarily escape every degree of disturbance. But when trouble comes, the effect is transient, and she escapes the healthy reaction of the disturbed brain on the local disease of the organs of generation, which is often a serious complication. Of the disturbances which may be produced by a disease of the organs of generation, he says there is no

organ in the body that may not be affected more or less profoundly.

We have no space to farther quote from this remarkable work. If we have done so to the extent that will induce every practitioner to read the work, we shall have been content. It is not to be expected that this book is the end of the law, but simply that it is the best guide for the study of the law at date of writing. The issue of the work harmonizes with the usual strength and beauty of Lea's publications.

Rindfleisch's Elements of Pathology.*

The editor tells us that his aim has been to form the natural groundwork needful to establish pathology as a natural science, and place the same in as clear a light as possible.

The facts presented are not new, but not so the arrangement.

Thus the entire work is divided into a general part and a special part. The general part is divided into (1) The local outbreak of the disease, (2) The anatomical extension of disease, (3) The physiological extension of disease. The special part is divided into (1) Traumatic diseases, (2) Parasitic diseases and infections, (3) Defective development and growth, (4) Diseases due to overwork, (5) Diseases of involution.

Under the local outbreak of diseases, we have (1) Hyperæmia, (2) Inflammation and the formation of tumors.

Under the head of Anatomical extension of disease we have, (1) Metastasis, (2) Fever, (3) Cachexia and amyloid degeneration, (4) Irritation of the nervous system.

Under the heading of Physiological extension of disease, we have A—Vegetative disturbances. B—Animal disturbances. Under vegetative disturbances we have (1) Disturbances of nutrition, (2) Disturbances of circulation, (3) Disturbances in the formation of the blood. Under Animal disturbances we have, (1) Hyperæsthesia, (2) Anæsthesia, (3) Hypercinesia, convulsions, (4) Hypocinesia, paralysis, (5) Psychical irritation and paralysis, (6) Neuro-vegetal Disturbances.

The book is written in a most entertaining

style, unlike what is usually presented in books of the general character of this.

As an illustration of this we quote the following. It occurs during the consideration of fever: "I consider a chill to be nothing more than an erroneous interpretation of the unquestionably increased escape through the skin, of bodily heat augmented by the high temperature of the blood of the fever patient. The heat regulating apparatus fluctuates hither and thither, uncertain whether to lower the bodily temperature by opening the radiating apparatus of the skin, or to prevent the escape of warmth by contracting the capillaries. This indecision often lasts for some time. As an example of this vacillation, in apparatus otherwise so incomplete, we might mention the sudden shiver produced by a slight breeze in a patient whose skin is burning with fever. Whatever may be the thermal effect of a chill there is no doubt that it preserves warmth, and that the previous temperature of the blood is increased. But since in fever the loss of heat, in spite of the preservation of warmth is greater than in health, the preservation of heat by a chill cannot be regarded as the sole cause of fever, but only as a secondary factor of the same. The gradation which is found by minutely observing the daily rise and fall of fever, is to be attributed to the vacillation of the heat regulating apparatus.

Again we must not forget that chills and ague fits are only temporary phenomena, and that they alternate with that totally different condition of the heat regulating apparatus in which by dilatation of the capillaries, the abnormal loss of heat is still farther increased. The over-irritation of the capillaries is followed by a relaxation of their muscular walls, which often lasts for some time. This is associated with a sensation of heat which often becomes unbearable, because the nerve filaments in the skin now record this elevation of temperature—an office they are only called upon to fill when the external temperature has far exceeded that of the blood.

During the entire rise and acme of the fever, this same fluctuation of the heat regulating apparatus continues. When the crisis approaches, we often find hyperæmia of the skin, together with profuse perspiration. Under the double influence of increased radiation and evaporation, defervescence sets in, the temperature in the meantime falling to normal or occasionally below."

We cordially commend this book to all medical students and medical men as intensely

*THE ELEMENTS OF PATHOLOGY. By Dr. Edward Rindfleisch. Translated by Dr. Wm. H. Mercur. Revised by Dr. Jas. Tyson. Philadelphia, P. Blakiston, Son & Co. 1884. Pp. 263. Cloth, \$2. For sale by John Macfarlane, Detroit.

interesting and unusually suggestive of important practical results. That it will find a place in every medical library we earnestly hope.

Sims' Story of His Life.*

Few men in the medical profession ever attained so great a prominence among both the profession and the people of the world, as did Dr. Sims. His southern proclivities sent him abroad to live during the war of the rebellion, and hence the old world became quite as much his home as the new. The story before us is remarkable for its power of simple statement. It throws a flood of light upon the customs and habits of the early settlers of South Carolina, as the writer's life was intimately united to these customs and habits. His active professional life was a long one, so that he really connected two generations of medical men. Especially interesting is the story to one of northern birth and education, as it opens up a mode of life even yet imperfectly understood, even among the well educated classes. Sims' professional life, in its principal features, is perhaps better known than that of any other doctor of American birth. But in the story before us we have not a simple repetition of this, but the blending with it of the real thoughts and actions of the boy, with the characteristics of his ancestors, and his private life as a man. Hence it is a story for all students of human character, interested in the expedients by which apparently insurmountable obstacles are or have been overcome, and a new path marked out and followed. There was a real genius in Sims, a genius for surgical work, a genius for making and keeping friends, with patients, the public and the profession, a genius that compelled the confidence and adherence of especially women. None among men better knew how to manage sick women; in fact, it will be apparent to the most superficial observer, that the management of sick women is the most important characteristic of the best gynecologist.

Of course this biography will find its way into every library of every medical man, and indeed of every intelligent person.

That it will exert a wholesome influence

upon the average reader we fully believe. It is not the story of a man who regarded himself as perfect, but rather that of one who constantly strove, amid many difficulties, to make the most of his wonderful powers. The advantage of large numbers of patients willing to trust the doctor while he tried plan after plan, year after year, without success, is sufficiently evident. But the grand results are also equally evident. These patients were an invaluable clinic to Dr. Sims, and without them it would have been impossible for him to have worked out the problems connected with the cure of vesico-vaginal fistulae. The power to mould men and especially women in the direction required for the accomplishment of his ends, is especially apparent in the several steps taken to establish the Woman's Hospital of New York. To be able to persuade and buy the board of aldermen of the city and the legislature of the state, was a marvelous piece of political engineering. But it perhaps was more wonderful that he should have been able to get the endorsement of the medical profession, and then let the profession alone while he conquered the society leaders of the aristocracy, and harnessed these magnates to the performance of his wishes. But only thus was there success possible for his enterprise. Among newspaper men also he had great aid. In fact, if the truth was told, we expect that he had more free advertisement in this respect than any doctor who actually paid for his advertising. But it must also be said that he used this advertising for better purposes than some who have sought to imitate him.

Sims was an honor to his family, his profession, and to his race. Long will his memory remain green in the minds of thousands. So long as gynecology exists, so long will his works follow him to aid others in their mission to ameliorate the sufferings of unfortunate women.

Report of the Surgeon General of the Navy for 1882.*

This series of reports was begun in 1880. As will be noticed, this report covers more than six hundred pages. It gives the sanitary

***THE STORY OF MY LIFE.** By Dr. J. Marion Sims. Edited by his son, Dr. H. Marion Sims. New York. D. Appleton & Co., 1884. Cloth. pp. 471. Price \$1.50. For sale by John Macfarlane, Detroit, Mich.

* **SANITARY AND STATISTICAL REPORT OF THE SURGEON GENERAL OF THE NAVY FOR THE YEAR 1882.** Washington: Government printing office, 1884. Cloth. pp. 622.

condition of the ships and naval stations in all parts of the world. This at once exhibits the accidents and diseases incident to every portion of the earth near the seas. A comparison of the naval reports of other nations shows that there is a general periodicity in diseases. Some years exhibit a universal decrease of activity of morbid causes, other years exhibit the reverse. The sources of these great cosmical causes of disease are unknown. These reports as from year to year they are made will furnish the data upon which a study of these causes can be carried on

The report recommends the sale of the several large hospitals now in charge of the department. The money to be placed in the Naval Hospital fund, and drawn upon as needed to support the hospital system. It advises that there be but one large hospital, supplemented by many small ones cheaply erected, and of sufficient size for existing needs. The large general hospital it would have located at Norfolk, Va., on account of its admirable climate and easy accessibility at all times.

Its says that its manufacturing establishment at Brooklyn, N. Y., could not compete with the large manufacturing chemists. Hence it was closed and the supplies obtained by competitive bids from the manufacturing chemists. The same money has far better supplied the needs of the service. Its museum and library are described with commendable pride. These bid fair to offer substantial attractions to the student of sanitation, especially on the sea going vessels. The total number of sick sailors treated during the year was thirteen thousand two hundred and sixty-three. The two leading causes of diseases are syphilis and rheumatism. Special legislation is commended as the means of preventing syphilis, and protection from cold and dampness on shipboard as preventive of rheumatism.

It is interesting to note that certain diseases are more prevalent in the force in certain localities. Thus diseases of the eye were more prevalent in the North Atlantic and less so in the European squadron. Diseases of the ear were especially noticeable in the North Atlantic and Pacific squadrons and least in the South Atlantic and European, and so on through the other diseases. The sanitary condition of each ship in the navy is fully presented. A vast number of tables and maps present the data in a shape that enables the reader to comprehend their bearings.

Naphey's Modern Medical Therapeutics—Eighth Edition.*

All members of the medical profession know the nature of this book. With a large proportion of the profession it is very popular. The present volume is still farther extended in the line of its general character. All pertaining to the diseases of children has been omitted, as it is the editor's intention to still farther multiply this series of works by a new volume exclusively devoted to the "Diseases of Children." It will be remembered that there is already a volume devoted to Surgical Therapeutics, and one devoted to Diseases of Women including obstetrics. But in spite of the elimination of all matter pertaining to these subjects this volume is still one hundred pages larger than the last edition. The opinions, and prescriptions of different medical men are here presented as given in their published books, lectures, or by letter. Why the prescription is made, what it exactly does, viewed from a pathological or physiological standpoint the book does not tell us. From its point of view the book is all that could be expected and a great improvement upon former editions. But we regret exceedingly the state of the medical profession that induces it to buy, read and depend upon books of this class. It indicates a very meagre education, and very limited mental powers, and less devotion of the study of the principles of the healing art. For instance, if a doctor has a clear idea of the cause and pathology and clinical history of acute bronchitis, and the agents that modify favorably the several factors of the pathological process, he will be able to make out a prescription for an individual patient far better for the patient than one copied from any living practitioner. The man is not fit to practice medicine who is unable to detect and meet the indications presented by this special disease. The same may be said of all other diseases. To depend upon prescriptions made by any other doctor is a confession of incompetency. Whence this comes and how it can be removed is the medical problem presented to every well wisher of the medical profession. The editors and publishers of

* MODERN MEDICAL THERAPEUTICS, a compendium of recent formulæ and specific therapeutical directions from the practice of eminent contemporary physicians. By George Napheys, A. M., M. D., edited by Dr. J. F. Edwards and Dr. D. G. Brinton. Eighth edition, enlarged and revised. Philadelphia, D. G. Brinton, 1885, pp. 629. Cloth, price \$4.00. For sale by John Macfarlane, Detroit.

this work are not to be blamed if they prepare a book that meets an existing need, in fact this is simply business common sense. They simply have utilized the imperfect education of so many medical men, to make money. We could have wished that they could have made as much money by the preparation of a medical work which would indicate a higher plane of medical attainment.

Treves on Intestinal Obstruction.*

The obvious difficulties in the study and treatment of this class of cases are appalling to the student and practitioner. Unlike some cases, action must be prompt or death will ensue. In England alone it is said that more than two thousand persons die from intestinal obstruction each year.

In the work before us, the pathological aspects of the case are first dealt with, then the symptoms and finally the prognosis. The work is in substance an essay to which the Jackson Prize was given by the College of Surgeons in 1884. It has, however, been rewritten and revised to date of publication.

The latest views as to pathology, diagnosis, clinical history and treatment are fully and fairly presented. We mistake not if every physician and surgeon do not find this book both of great interest and profit to them. No one can afford to be ignorant of the latest and best means of meeting these cases. The illustrations are new, and instructive, if not in the highest style of art.

Rohe's Text-Book of Hygiene.†

The author tells us that he has tried to collect the essential facts upon which the art of preserving health rests. Certainly he has collated very many interesting facts upon this subject, and he has given them in an entertaining manner. All will be benefitted by a review of these facts, even if little that is new can be gathered. The work is best fitted for popular distribution among intelligent persons outside of the medical profession. Here it is destined to accomplish great good.

* **INTESTINAL OBSTRUCTION—ITS VARIETIES, WITH their pathology, diagnosis and treatment.** By Frederick Treves, F. R. C. S. Philadelphia: Henry C. Lea's Son & Co. 1884, Cloth, pp. 515. For sale by Phillips & Hunt, Detroit.

† **A TEXT-BOOK OF HYGIENE.** By Dr. George H. Rohe. Baltimore: Thomas & Evans. 1885. Cloth, pp. 324. For sale by John Macfarlane, Detroit.

Millard's Treatise on Bright's Disease of the Kidneys.*

The author tells us that this work is the result of twenty-six years of extensive hospital and private practice. He has also done a large amount of work in the physiological and pathological laboratories. His illustrations are numerous, and he says they are mostly drawn by himself from his own specimens. While not claiming the work as original in the sense that the facts and thoughts are entirely new, he does claim to have thoroughly digested all his facts from whatever source derived, and presented them in what he deems the most attractive form for the convenience and instruction of the medical profession.

While the title of his book is Bright's Disease, it includes the various forms of nephritis. In fact, in the body of the work he uses this term entirely.

We have examined this book with care. We have found it interesting and instructive. Most of the new views on mooted points are fully and impartially presented. The author's own researches are interesting, even if they do not greatly increase our knowledge. His presentation of the description of the several forms of nephritis, are clear and to the point.

The treatment will doubtless prove the most attractive to the active physician, as he will find all recent additions to our renal therapeutics adequately represented. The book is handsomely printed on the best paper, and is a creditable addition to our existing works upon this subject.

Pierce's Elements of Surgical Diagnosis.†

This is one of Lea's Medical Student Manuals. The author has endeavored to state in a clear and useful manner those principles of diagnosis which apply in all cases and under all circumstances. This attempt to place within the reach of the student the knowledge by which he shall in any case determine the

* **A TREATISE ON BRIGHT'S DISEASES OF THE KIDNEYS, its pathology, diagnosis and treatment, with chapters on the anatomy of the kidney, albuminuria, and urinary secretion.** By Dr. H. B. Millard. With numerous illustrations. New York: William Wood & Co. 1884. Cloth, pp. 246. For sale by John Macfarlane, Detroit, Mich.

† **ELEMENTS OF SURGICAL DIAGNOSIS.** By A. Pearce Gould, M. S. Philadelphia: Henry C. Lea's Son & Co. 1884. Cloth, pp. 584. For sale by Phillips & Hunt, Detroit.

special ailment of a patient has been more than usually successful.

In accordance with the prevailing notion of practitioners, the writer has excluded all reference to the surgical affections of the eye, ear, larynx, and female pelvic viscera.

He recognizes three elements in a diagnosis, viz: The recognition of the anatomical features of the local lesions; then their physiological or pathological lesions; and lastly the constitutional change either leading to, or resulting from the local lesion.

As to general methods of diagnosis he prefers to get a complete history first and then examine the lesions presented. He directs attention to the great value of case-taking, begun early and continued late.

The experienced practitioner will scarcely come to this work for direction in making a diagnosis; still he will find the reading of it interesting and suggestive. But the young practitioner and medical student will find it not only interesting, but very instructive, in enabling them to so classify their knowledge as to enable them to use it with greater readiness.

M'Gregor-Robertson on Physiological Physics.*

The application of physical modes of research to the study of physiology has revolutionized the science. More than that, it holds out the hope that we shall learn far more than we know at present concerning the action of the several portions of the body in health and disease. The author of the work before us, in his vocation as a demonstrator of physiology, found his students ignorant of such knowledge of physics as is needful in order to intelligently pursue the study of modern physiology. Hence he began to instruct them weekly in elementary physics, especially in their application to the methods of physiological study. The outcome of this course of instruction is the work before us. One branch of physics after another is taken up. The work is done in a very satisfactory manner, and will prove helpful to that very large class of medical students and medical men who are very ignorant of such knowledge as is here presented. Of course the student that has been thoroughly trained in physics will have no use for this volume, farther than he desires to use it for purposes of review.

*THE ELEMENTS OF PHYSIOLOGICAL PHYSICS. By Dr. J. M'Gregor-Robertson. Illustrated with 219 engravings on wood. Philadelphia: Henry C. Lea's Son & Co. 1884. Cloth, pp. 528. For sale by Phillips & Hunt, Detroit, Mich.

Erichsen's Collection of Medical Rhymes.*

This volume presents in collective form many rhymes that have been written concerning doctors, or their sciences or art. Those interested in rhymes, will be pleased to have this collection at hand for their convenience. It cannot always be said that these rhymes are true poetry, but they have a jingle, and a rhythm, generally pleasing to the ear and sometimes instructive to the brain.

The illustrations are, on the whole, a fitting accompaniment of the poems. They cannot be called the highest exhibition of modern artist's skill, but they convey to the eye ideas, partially present in the text. The poet in the profession, and the poetically inclined will place this volume in their libraries, and while away a leisure hour in the emotions aroused by the reading of these rhymes.

Abstracts from Exchanges.

Prepared by Judson Bradley, M. D., and A. B. Lyons, M. D.

Neurology.

Dr. Seguin (*American Journal of Neurology and Psychiatry*, Vol II., No. IV.) claims that hyoscyamine is indicated in mania, restlessness, dementia agitata, epileptic mania, insomnia in general, epileptic states, hysterio-epilepsy; in mania it is a more certain hypnotic than chloral. It has cured *persecutory and suspicious delusional* insanity.

Merck's hyoscyamine is the most reliable preparation to use, the dose of which is from $\frac{3}{16}$ to $\frac{1}{4}$ of a grain, or even more in some cases. It is best, however, to increase the dose. There is a preparation on the market called hyoscyamine (concentration), which is neither extract nor alkaloid, and the dose of which is from one-eighth to one grain, but this is often nearly or quite inert.

TONIC CRAMP OF THE VOLUNTARY MUSCLES OR MORBUS THOMSONII.—G. Seppilli (*Alienist and Neurologist*) from an extensive study of this disease, reaches the following conclusions:

1. The characteristic phenomenon of the disease of Thomson consists in a tonic spasm, not painful, of the muscles, and this is produced in the moment of inception of voluntary movements. In consequence of this there

*MEDICAL RHYMES. Selected and compiled by Dr. Hugo Erichsen. With an introduction by Dr. W. P. King. Illustrated. J. H. Chambers & Co., St. Louis, Mo. Cloth, pp. 220. For sale by Phillips & Hunt, Detroit.

intervenes between the voluntary impulse and the execution of the movements, a length of time that ordinarily oscillates between one second and ten.

2. The tonic spasm is produced exclusively in the voluntary muscles, whether in those of the limbs or of the trunk and face. The rectal and vesical sphincters show no disturbance.

3. The contraction of the voluntary muscles does not yield immediately to the volitive activity, but is prolonged somewhat longer than normal. This is especially verified when the muscles accomplish abrupt or rapid or exaggerated movements, or are put in action by means of electric or mechanical stimuli, applied directly over them, or over the nerves which ramify in them. Sometimes passive movements provoke a prolonged contraction of the muscles acted on.

4. Repetition of the voluntary movement causes the entire cessation of the phenomenon of tonic spasm in those muscles which have executed them. Sensibility remains intact.

5. There are reasons for holding with more probability that the disease of Thomson is a neuropathic, rather than of a myopathic nature, and that it depends on an exaggerated activity of the nervous apparatus which produces muscular tone. This doctrine is founded principally on the fact that the muscular phenomena of the disease of Thomson have much analogy to the muscular phenomenon of hysterical hypnosis, the genesis of which is precisely explained by a functional hyperactivity of the nervous centres of muscular tonicity.

MENTAL CONTAGION IN INEBRIETY.—Dr. T. D. Crothers (*Alienist and Neurologist*) reports the following remarkable instances of this affection:

Two railroad officials who had both been brought up together, and were temperate, healthy men, and very intimate in all their associations, became inebriates. One became an inebriate from the loss of a trusted fund in a mining venture, which produced the most intense sorrow and depression of spirits. This was shared by his friend and both became intoxicated. For the next two years, whenever they came together at intervals of a few weeks, both became intoxicated, and both were perfectly temperate when separate. The moment both came together, old mental and physical depressions seemed to start up with great intensity, and the craving for spirits could not be resisted. One of the men trav-

elled in Europe with a drinking party for several months, a total abstainer, and was separated from his friend over a year and never drank. On one occasion they were separated for two years and never used spirits, but both were intoxicated within two hours after meeting.

Again, a noted business man became an inebriate, dating from a railroad accident, with concussion of the brain. He became an impulsive, irregular drinker; entered into politics, was very energetic and prominent in the primaries. He gathered about him a large number of persons who had been previously temperate, but who drank with him, and all became incurable drunkards. For many years he was the ruling spirit of a club, and a large circle of inebriates, attached to him by his personal magnetism and supposed power, all became imitators and inebriates.

Again, a manufacturer of large influence, after some severe illness, became a regular and moderate drinker. He defended his position with skill and earnestness, drinking at his own table and in public, and never seeming worse for it. His example and specious reasoning drew into his circle a large number of persons who eventually became inebriates. Nearly all his clerks and workmen followed his teachings, and all efforts to secure sober men in his employ and keep out the inebriates failed. Men who came into his intimate circle as assistants in business, all suffered from inebriety, and were turned out after a time.

Diseases of Children.

SYPHILIS, ITS INHERITANCE AND TRANSMISSION.—Dr. M. Kassowitz (*Amer. Jour. Obstetrics*) concludes a very interesting discussion of this subject thus:

1. It is fully proved that in a large number of cases, women who have borne syphilitic children from syphilitic fathers, have themselves, even when under close observation for years, shown absolutely no symptom of the disease.

2. When inheritance from the side of the father is removed, these women, who have a few years previously nourished syphilitic children in their wombs, bear healthy children.

3. Clinical observation and experimental inoculation both show that these women are much less receptive of syphilitic poison than other individuals, yet infection in a few such cases is fully proven.

4. The reports of cases of manifest syphilis in some mothers, without any preceding primary lesion, are extremely contradictory, and only a few cases of any scientific weight. The proof of such an occurrence must be gained by far more exact research.

5. The separating wall between the foetal and maternal circulation systems, therefore, in a large number of cases, proves an obstacle to the transmission of the syphilitic poison from foetus to mother, and it has not been strictly proved, even in single cases, that this obstacle can be overcome in this direction.

Gynecology.

THOMAS ON "THE TREATMENT OF PUERPERAL SEPTICÆMIA."—In his last address before the N. Y. State Medical Association (*Med. Surg. Reporter*) Dr. T. G. Thomas says that if he were called upon to sum up the treatment of an undoubted case of puerperal septicæmia, marked by the usual symptoms of pulse of one hundred and twenty, temperature one hundred and five to six, he would say:

1. Quiet all pain by morphine hypodermically.
2. Lower the temperature at once below a hundred, not by the barbarous method of the cold bath, but by the far better one of the coil of running water.
3. Wash out the uterine cavity with antiseptics.
4. Feed the patient upon milk and nothing else, unless some good reason exists for changing it.
5. Exclude from her room all except the nurse and doctor, keeping her as quiet as possible.

IS PELVIC CELLULITIS A LYMPHANGITIS?—Dr. Chas. W. Adams (*Medical Index*, Nov., 84), in an elaborate article, brings forth the following reasons for holding the ordinary cellulitis in women as a lymphangitis:

Pelvic cellulitis, according to the received opinion of the disease, cannot be accounted for on anatomical or pathological grounds.

An inflammation in or of the cellular tissue in the pelvis, benign or septic, originates in the capillary lymphatics wounded in some lesion of the utero-vaginal mucous membrane.

The lymphatics are carriers of matter, benign or septic, which sets up an inflammation of the glands or lymphatic plexuses

in tissues or organs lying in the pelvis at a distance from the point of infection.

Inflammation of the cellular tissue is simply secondary to inflammation of lymphatic glands, vessels or plexuses which act as internal buboes.

Such a lymphangitis will undergo resolution, suppuration, or remain in a chronic inflamed state for an indefinite time.

When thus, as the result of an inflammation, pus or effused matter occurs, it will burrow through the cellular tissue following the lines of least resistance the same as collections of pus in other parts of the body.

The lymphatics of the uterus, and its annexes and the peritoneum are so intimately united by physical contact and physiological action, that lymphangitis will of necessity be accompanied by peritonitis.

The seat of inflammation depends not on the presence of cellular tissue or vascular richness, but on the lymphatic connection of the part affected with the point of infection.

Under the term of pelvic cellulitis, or inflammation, we recognize but one condition, viz.: lymphangitis accompanied by plastic infiltration of cellular tissue.

In the puerperal state we have lymphangitis, phlebitis and peritonitis resulting from the absorption of septic matter in a high grade of activity, acting on tissues undergoing a retrograde metamorphosis.

Only by a recognition of lymphangitis in place of cellulitis can we account for the relation of cause and effect, and fulfill the indication of the causes of the disease.

The recognition of this view of the disease urges every practitioner to take the utmost antiseptic precaution in treating every lesion of the utero-vaginal mucous membrane.

Obstetrics.

MANAGEMENT OF THE THIRD STAGE OF LABOR—THE THREE METHODS.—Prof. Stadfeldt (*Med. News*) gives the results of a considerable observation and study of the results of the expectant, the Crédé method and the Dublin method. By the first the placenta is allowed to become detached spontaneously and to escape into the vagina, unless severe hæmorrhage indicated its earlier removal. In Crédé's method circular frictions of the fundus uteri were made, immediately after the birth of the child, and during a strong after-pain, generally the placenta

was pressed out by a combined concentric and pushing-down pressure on the fundus and body of the uterus. By the Dublin method pressure was made upon the fundus uteri immediately after the birth of the child. He thought this tended to produce ante flexion and thereby impede the escape of the placenta. He had therefore applied friction to the fundus uteri, and as in the first stage of Cr  d  's method, and when the placenta had escaped into the vagina, it was easily removed by the help of the two fingers, with simultaneous gentle traction on the umbilical cord. In a few cases where the placenta was not expelled at the end of the half hour, he made a depressing movement through the fundus. When these methods failed the placenta was removed by introducing the hand into the uterus. From about a thousand cases treated by each method, he found that the results indicated that when compared with the expectant method, that of Cr  d   was preferable. He thinks that the objectors to Cr  d  's method are wrong in attaching too much importance to its disadvantages, and in overlooking the fact that it removed the dangers attendant on the expectant method during the time of waiting. It cannot be denied that the safe and proper application of Cr  d  's method required much more intelligence and accuracy, hence harm might result from it in the hands of ignorant persons. Hence it should not be taught to midwives. The Dublin method is easily learned, and is free from the dangers of the expectant and Cr  d  's methods. On the one hand it diminishes the liability to flooding and of retention of the placenta; and on the other removes the danger of separation and retention of the membranes.

BOZEMAN ON "EXTRA UTERINE PREGNANCY."—Dr. N. Bozeman (*N. Y. Med. Jour.*) concludes an able study of this subject thus:

1. Retroversion and retro-lateroversions of the uterus, and the consequent changes in the relationship of its appendages, contribute largely toward explaining the causation of extra-uterine pregnancy.

2. Extra-uterine pregnancy probably has its seat originally in one or other of the Fallopian tubes, and the abdominal varieties of it occur afterward, from rupture of the tube or by partial or complete escape of the impregnated ovum from the fimbriated extremity of the same.

3. After completing the diagnosis of tubal

pregnancy between the seventh and fourteenth weeks, it is of urgent importance in all cases, to destroy the life of the f  etus without delay, by electricity, the surest and safest method at our command, in order to guard the individual against the immediate dangers of rupture of the cyst now liable to take place at any time.

4. The practitioner, if he does not feel himself competent to meet the threatened danger of rupture, by prompt surgical interference, should at once summon to his aid a surgeon prepared to carry out his wishes at a moment's notice.

5. The surgeon, where the rupture of the cyst occurs, as indicated by the usual symptoms of shock and loss of blood should open the abdomen and secure the bleeding vessels without delay, success in all cases depending on the promptness and thoroughness of the procedure.

The differentiations of the particular variety of ectopic gestation existing is of no consequence at this early stage, the treatment before and after the cyst being the same in all cases.

When abdominal pregnancy is diagnosed at a later period of gestation, whether seated partially in the fimbriated extremity of a Fallopian tube, or entirely within the peritoneal cavity, electricity should still be promptly employed, on the assumption that the earlier the life of the f  etus be destroyed, the less grave will be the remote dangers arising from disintegration, absorption, suppuration, ulceration and the use of the knife.

8. In all cases of abdominal pregnancy the f  etus becomes encysted more or less completely, and that, whether its life is destroyed artificially, or it dies before or at the full term of gestation, it is liable to complicate a subsequent normal pregnancy by obscuring its diagnosis and seriously interfering with normal labor.

9. When normal labor occurs with pre-existing abdominal pregnancy, it should be allowed to progress to its natural termination, the practitioner assisting the delivery with instruments, when demanded. In event of the death of the f  etus presenting in Douglas pouch as an impediment to the normal labor, or as a prominent projection from the same locality into the vagina, immediately after the completion of labor, the cyst should be opened and emptied of its contents, the delivery of both f  etuses thus being completed at the same sitting.

Otology.

PROGRESSIVE AND INTERMITTENT DILATATION OF THE EUSTACHIAN TUBE.—Menière (*Centralb. f. Chir.*) recommends the following as more satisfactory than the usual insufflation of air, etc.: A metal catheter is introduced into the mouth of the tube and retained there with the left hand, while with the right an elastic bougie is gently passed through the catheter till it appears to be caught and can be no longer pressed forward without the use of force. The bougie is then left in situ, and the patient told to incline his head slightly forward. He remains in this position from five to twenty minutes, at the end of which time the bougie falls out spontaneously. This procedure is repeated daily with stronger bougies.

Ophthalmology.

RELAPSING CYCLITIS.—Mr. Jonathan Hutchison (*British Medical Journal*, November 22, 1884) describes this affection thus: "It is a cyclo-kerato-iritis, involving the ciliary region of the eyeball, the adjacent part of the cornea and iris. Sometimes one of these structures suffers more than another, but usually all are involved. It seldom damages the pupil itself very much, and it does not show much tendency to involve the choroid or vitreous. It usually begins in one eye and only affects the other after a long interval, and the last one suffers more severely than the first. It may begin in early life, but often does not do so till middle periods. When once it has begun, it never wholly leaves its victim, but continues either to persist with slow chronicity, or recurs over and over again after intervals of health. It causes scars in the ciliary part of the cornea, thinning and discoloration of the ciliary region of the sclerotic, and ends by either making the whole cornea dull or inducing staphyloma. It may become needful to excise the eyeball, on account of the persisting irritability, combined with great impairment. It affects women more than men. I know of no treatment short of a complete change of climate, which does much to benefit it. In this respect it is like the form of iritis which is the result of inherited gout. I am not certain that all cases of this disease are due to gout.

THE FUNDUS OCULI IN INSANE INDIVIDUALS.—Drs. Wigglesworth and Bickerton (*The Brain*, 1884), in two papers, present researches covering two and a half years, a

large amount of material. All the classes of diseases found in insane asylums were included in the list examined. Their conclusions are:

1. In insanity proper, changes in the fundus oculi are found in a small minority of cases; but when allowance is made for changes depending upon associated constitutional conditions, errors of refraction, etc., the number of cases in which a connection between the cerebral state and the change in the fundus oculi, can even be suspected is very small. It follows from this:

2. In insanity proper no connection can be traced between the condition of the fundus oculi and the patient's mental state.

3. In a majority of cases of general paralysis of the insane, the fundus oculi presents a perfectly healthy appearance.

4. In a minority of cases clear and precise lesions are found.

5. These lesions fall into two main classes, the one tending in the direction of slight neuritis, the other in that of atrophy.

6. In the former class the affection declares itself as a hyperæmia of the discs, the edges being softened and indistinct, so that in some cases they can be traced with difficulty or not at all. These conditions tend to be replaced by atrophy, so that at length complete disorganization of the nerve may take place.

7. Though atrophy of the optic nerves may thus succeed to the slight chronic interstitial neuritis, it is also not infrequently primary at the disc; the atrophy may be complete and the patient become quite blind.

8. The pathological basis underlying the appearances of slight neuritis may be broadly characterised as tendency to overgrowth in the connective elements of the nerve; but the neuroglia corpuscles also becoming very large and numerous; these parts thus grow at the expense of the nervous elements which subsequently atrophy.

9. In the cases of primary atrophy, the pathological appearances eventually reached, though somewhat similar, may possibly take place in the reverse order at the disc; the nerve fibres being first to dwindle, and the fibrous elements—trabeculae, etc., taking on a subsequent increased growth.

10. In a considerable proportion of the cases in which atrophy of the optic discs is met with, spinal symptoms are prominent in the disease. These symptoms point in the direction of posterior or lateral sclerosis of the cord. But the connection is by no means invariable.

STRABISMUS TREATED BY ADVANCING THE CAPSULE OF TENON.—De Wecker (*Archiv. Ophthalmol.*) proposes a new method of operating for strabismus. Briefly, it consists in separating the tendon of the weakened muscle from the capsule of Tenon, and drawing it nearer the cornea and fixing it in place by sutures, as in the case of the ordinary operation for advancement of the rectus muscle. Thus he claims to increase rather than to diminish force, to avoid over correction, and the disfiguring changes in the canthus, such as follow the ordinary operation. His plan of operation is thus: "A crescent of the conjunctiva, five mm. broad and ten mm. high is excised over the tendon of the muscle, the crescent being so placed that its cavity is towards the cornea, and that its middle corresponds with the tendinous insertion of the muscle. This being done, the conjunctiva retracts strongly so as to expose largely the edges of the muscle and the capsule of Tenon. The capsule is then incised near the insertion of the muscle, and separated from it above and laterally. This separation being effected the capsule is sutured and drawn forward by two threads passing near the upper and lower margin of the cornea. The capsule, sliding forward in this manner, re-attaches itself nearer to the cornea than before, and thus the desired effect is obtained. The incision and the separation of the capsule are indispensable; the amount of effect produced depends upon the degree of separation, and the larger or smaller extent to which the capsule is included in the suture.

DILATATION OF THE PUPIL.—ITS RELATION TO MORBID STATES.—Dr. H. R. Swanzy (*Hand-Book of Eye Diseases*) gives an excellent account of this phenomenon.

Mydriasis may be caused by irritation of the pupil dilator centre or fibres, or by paralysis of pupil contracting centre or fibres.

Irritation mydriasis is characterized by a moderately dilated pupil, contracting somewhat to light and on convergence, but not dilating on sensitive or physical stimuli, easily dilated ad maximum by mydriatics, but with difficulty contracted ad maximum by myotics. Paralytic mydriasis exhibits a moderately dilated pupil, reacting to sensitive and physical stimuli. The reaction to light and on convergence, varies according to the seat of the lesion. If the latter lie between the iris and the pupil-contracting centre, the direct and consensual reaction to light is wanting, as also the associ-

ated motion on convergence of the visual lines. But if the lesion lie between the retina and the pupil-contracting centre, the direct contraction to light is wanting, but the consensual contraction and that on convergence retained. In either case the pupil can be dilated ad maximum by mydriatics, but not contracted more than to medium size by myotics.

Irritation of the pupil-dilating centre and paralysis of the pupil-contracting centre existing simultaneously, give rise to maximum mydriasis. In it there is absolutely immobility to stimuli of all kinds except strong myotics, which may bring it back to normal size.

Irritation mydriasis occurs: 1. In hyperæmia of the cervical portion of the spinal cord, and in spinal meningitis. 2. In the early stages of new growths in the cervical portion of the cord. 3. In cases of intracranial tumor and other diseases causing high intra-cranial pressure, although these may give rise to paralytic mydriasis. 4. In the spinal irritation of chlorotic or anæmic people after severe illness, etc. 5. As a premonitory sign of tabes dorsalis. 6. In cases of intestinal worms, owing to the stimulation of the sensitive nerves of the bowel, and sometimes in other forms of intestinal irritation. 7. In psychical excitement, as acute mania, melancholia, progressive paralysis of the insane. Paralytic mydriasis may be due either to a paralysis of the pupil-contracting centre, or as a result of the stimulus not being conducted from the retina to that centre. It may be found under the former circumstances: 1. Sometimes in progressive paralysis where at first there was myosis. 2. In various diseased processes at the base of the brain, affecting the centre of the third nerve. 3. In a later stage of thrombosis of the cavernous sinus. 4. In orbital processes which cause pressure on the ciliary nerves. 5. In glaucoma. 6. In cases of intra-ocular tumors which have attained a certain size.

In paralytic mydriasis due to lack of transmitting power of the nerve fibres, contraction of the pupil will take place only on convergence of the visual lines. The same condition of pupil will be found if the lesion lie in the course of Meynert's fibres, although vision may be normal. If the lesion lie in the centre of vision, or in the course of the fibres connecting this centre with the corpora quadrigemina, although absolute blindness exist, the reaction of the pupil to light will be perfect. Paralytic mydriasis, due to non-

conduction of the light stimulus, is found in most cases of optic atrophy.

CONTRACTION OF THE PUPIL IN DISEASE.—Dr. H. R. Swanzy (*Hand-book on Eye Diseases*) gives an unusually excellent account of the state of the pupil in disease. As it is an important subject to every practitioner, we quote:

Myosis may be caused by irritation of the pupil-contracting centres or fibres, or by paralysis of the pupil-dilating centre or fibres, or by a combination of both. Either alone causes a medium myosis, a combination of the two a maximum myosis.

Irritation myosis is not usually increased by the stimulus of light, nor on the convergence of the visual axes, nor does it diminish in the shade. Mydriatics dilate such a pupil widely, myotics contract it ad maximum. In paralytic myosis the pupil reacts well to light and on convergence, but does not dilate on application of sensitive or physical stimuli or with co-ordinated motions. Mydriatics dilate such a pupil only partially, while myotics contract it ad maximum. In maximum myosis every reaction is wanting, strong mydriatics alone producing a medium dilatation.

Irritation myosis is found in: *a*—The early stages of all inflammatory affections of the brain and its meninges, in simple, tubercular, and cerebro-spinal meningitis. When in these diseases the medium myosis gives place to mydriasis, the change is a serious prognostic sign, indicating the stage of depression with paralysis of the third nerve. *b*—In cerebral apoplexy the pupil is at first contracted, and this contraction is a diagnostic sign between apoplexy and embolism, in which latter the pupil is unaltered. *c*—In the early stages of intra-cranial tumors, situated at the origin of the third nerve or in its course. *d*—At the beginning of an hysterical or an epileptic attack. *e*—In tobacco amblyopia probably from stimulation of the pupil-contracting centre by nicotine. *f*—In persons following certain trades as the result of a long-maintained effort of accommodation, the pupil-contracting centre being subject to almost constant stimulus. *g*—As a reflex action in ciliary neurosis; consequently in many diseased conditions of those parts of the eye supplied by the fifth nerve.

Paralytic myosis occurs in spinal lesions above the dorsal vertebrae; in the simple form of this myosis the pupil has but a medium contraction and reacts both to light and con-

vergence. This condition is found in the early stages alone, when the disease has attacked only the cilio-spinal centre, or higher up as far as the medulla oblongata; later on when Meynert's fibres become engaged, we have the Argyll Robertson pupil. The pupil although contracted and responding to light but slightly or not at all, contracts on convergence of the visual axis. The very minute pupil often seen in tabes dorsalis is probably due to secondary contraction of the sphincter pupillæ. The myosis and motor phenomena are not directly connected, for it sometimes happens that pupils which do not react to light and do contract on convergence are not habitually contracted and may even be somewhat dilated. The myosis is a sign, and an important one, of disease of the posterior columns, while the defective reaction to light with retained contraction on convergence indicates disease at some distance from the spinal cord, namely, in Meynert's fibres. Paralytic myosis is also found in general paralysis of the insane. In acute mania the pupil is usually much dilated, and when this mydriasis is changed for myosis, approaching general paralysis may be prognosticated. Myosis following on irritation mydriasis is also found in myelitis of the cervical portion of the cord. In bulbar paralysis, if paralytic myosis occurs the disease is probably complicated with progressive muscular atrophy, or with sclerosis of the brain and spinal cord.

A contracted pupil also occurs in alcoholic amblyopia, due, probably, to an affection of the medulla oblongata, possibly fatty degeneration. Myosis may also be due to paralysis of the cervical sympathetic, which may result from injury, from pressure of an aneurism of the carotid, innominate, or aorta, or from pressure of enlarged lymphatic glands. In apoplexy of the pons varolii myosis is present, but it is not yet certain whether it is an irritation myosis or a paralytic myosis.

FATAL MENINGITIS AFTER ENUCLEATION OF THE EYE.—At a meeting of the Academy of Medicine in Ireland (*British Medical Jour.*) Dr. Arthur Benson showed the brain, and read the notes of a case of meningitis which had occurred in a girl aged 17, after enucleation of a shrunken eyeball, the result of secondary purulent inflammation excited in an old blind staphylomatous eye. Headache, vomiting, etc., began on the day after the operation. On the fourth day a bright erysipelatous-like flush occurred on the eyelids, nose and both

cheeks; it disappeared in 36 hours. There was no discharge from the socket of the eye which had been removed; but on the day that the first red flush was seen, there was slight secondary hemorrhage from the wound. Death by coma occurred on the eighth day, and the necropsy confirmed the diagnosis of purulent meningitis, the whole surface of pia mater being covered with lymph and pus. A summary of nine other cases, of all of which the author could find records, was given; and, of the nine, only two were known to have occurred after enucleation of the eyeballs in a state of purulent panophthalmitis, while four were known not to have been purulent, and in three the condition of the eye was not stated.

LARGE STEEL CHIP IN THE VITREOUS BODY; REMOVAL, WITH RETENTION OF NORMAL VISION.—Dr. P. H. Mules (*Brit. Med. Jour.*) reports a case illustrative of the value of the electro-magnet for the removal of iron or steel chips from within the eye. The patient was an iron-worker, and was struck in the left eye by a piece of metal; the chip penetrated the globe, unknown to the man, at the inner ciliary region, the wound being small and cleanly incised. There was no pain. Vision was unaffected. The ophthalmoscope showed a foreign body at the bottom of the vitreous chamber. The patient, who applied the day after the accident, was at once admitted into the hospital, chloroform administered, and the sclera opened through the tendon of the inferior rectus; through this opening, an armature, or end of a powerful electro-magnet, was introduced. On withdrawal, a piece of soft steel was found attached, weighing one grain, the surface being as large as half a split pea. Both eyes were kept bandaged for a fortnight. There was no reaction; the wounds of entrance and exit healed readily. Vision was normal, and six weeks from the date of the accident he resumed full work, and has since (four months) remained free from the slightest discomfort. In a considerable number of cases in which he had used the magnet, this is alone in its freedom from reaction and the exceptionally good results attending its use.

A NEW OPERATION FOR ECTROPION.—Dr. Argyle Robertson (*Edin. Clin. and Path. Jour., Ophth. Review*) has devised a new operation for this very troublesome condition of the eyelids. A long waxed silk ligature with a long moderately curved needle attached to either extremity, a piece of thin

sheet-lead one inch long and one-fourth inch wide and a piece of small-size rubber tubing are the necessary articles for the operation. One needle is inserted a little to the right of the centre of the lower lid and passed through a little below the edge of the lid; it is then inserted again at the bottom of the sac formed by the palpebral and the sclerotic conjunctiva; thence it is passed, under the skin, to a point about an inch below the edge of the lid, where it emerges and the ligature is drawn through. The other needle follows the same path on the other side of the centre of the eyelid, and is also brought out on the cheek near, but to one side of the spot where the first needle emerged. Now the lead, bent to the shape of the eyeball, is inserted under the loops formed by the ligature on the inner surface of the eyelid, and the rubber tube under the loops on the outer surface of the eyelid and the cheek (the latter formed by tying the ends of the ligature together), the lower lid placed in position the ligature is drawn snugly and the operation is complete. A slight relapse may occur when the apparatus is removed, but this is readily amenable to treatment by astringent applications.

Laryngology.

HOW TO CAUSE SHRINKAGE OF TONSIL-LAR HYPERTROPHIES.—Dr. J. J. Chisholm (*Med. Herald*), gives the following as the best method of shrinking tonsillar hypertrophies by the use of caustics. He takes a piece of wire the size of a fine knitting needle, roughens it for about an inch from one end, and firmly wraps this rough portion with absorbent cotton. This cotton is then dipped into a saturated solution of chloride of zinc and thrust to the very bottom of a crypt of the tonsil and kept there a few seconds. By renewing this for each tonsil several may be cauterized at a single sitting without causing any annoying irritation of the throat. A few applications will cause the gland to shrink.

GLANDULAR HYPERTROPHY AT THE BASE OF THE TONGUE AS A CAUSE OF TROUBLE WITH THE SINGING VOICE.—Dr. H. Curtis (*N. Y. Med. Jour.* Nov. 8, 1884) calls attention to three cases in his practice in which great impairment of voice was cured by reducing a glandular hypertrophy at the base of the tongue. The voice failure he ascribes to either direct mechanical obstruction to the free opening of the epiglottis or to a reflex action exerted on the motor laryngeal nerves.

The reported cases are so favorable that this cause of failing vocalization should not be longer overlooked.

Dermatology.

ON THE PATHOLOGY OF PAGET'S DISEASE OF THE NIPPLE.—Drs. Louis A. Duhring and Henry Wile, of the University of Pennsylvania, give in the July number of the *American Journal of the Medical Sciences* an instructive study of the pathology of Paget's disease, which has already evoked some discussion. The importance of the subject is apparent, and it ultimately resolves itself into the question of distinguishing between ordinary eczema of the nipple and another similar cutaneous pathological process which on good grounds is believed to lead to the formation of malignant disease of the mammary gland.

The affection is regarded by Drs. Duhring and Wile as an abnormal proliferation and degeneration of the rete, with secondary destruction of the papillæ of the corium, and subsequent development of scirrhous cancer of the atrophying variety. The cancerous change originates in the epithelium of the smaller ducts, and advances from below upwards and outwards as far as the skin is concerned; later it attacks the gland structure; and the retraction of the nipple is an early sign of carcinomatous change.

A SUGGESTION CONCERNING THE TREATMENT OF ACNE AND ACNE ROSACEA IN THE MALE SUBJECT.—A paper with the above title was read before the American Dermatological Association by Dr. S. Sherwell, of Brooklyn, N. Y. (*Boston Med. and Surg. Jour.*) He said that too little attention had been paid to disturbances of the genital tract, as causes of the diseases which formed the subject of his paper, and gave credit to Piffard and Hyde for having recognized their importance in this regard. He then spoke of the occurrence of chronic congestion and hyperæsthesia of the male urethra in some cases, and recommended for its relief the use of cold steel sounds. He concluded by detailing two cases which were greatly benefited by this means.

DERMATITIS HERPETIFORMIS: ITS RELATION TO SO-CALLED IMPETIGO HERPETIFORMIS.—In an instructive article in the October number of the *American Journal of the Medical Sciences* Dr. L. A. Duhring maintains that the impetigo herpetiformis of Hebra and the pustular and other varieties of dermatitis

herpetiformis are identical. Our knowledge of the disease, if these views be correct, is yet in its infancy. As clinical reports and other information come to light it will be found that it will assume an important position in dermatology, and many cases that have hitherto been regarded as obscure or as difficult of classification will become plain.

Therapeutics.

CONVALLARIA—INDICATIONS FOR ITS USE IN HEART DISEASE.—Dr. Bogojavolenski (*Med. News—Gaz. Med. di Torino*, July 25, 1884) from many experiments and a comparison with the results reached by other observers gives the following indications for its use:

1. Palpitation resulting from a state of pneumogastric depression or paralytic palpitation, simple arrhythmia with or without hypertrophy of the heart, and with or without lesions of the orifices and valves.
2. Mitral stenosis, especially when accompanied by a defect of compensation in the contractile force of the left auricle and ventricle; the sphygmographic tracings show that the contractile force is markedly increased.
3. In insufficiency at the mitral orifice it is especially valuable when pulmonary stasis is threatened, and when dyspnoea occurs from the passive congestion with or without nervous troubles of respiration.
4. In aortic insufficiency its favorable effects may be easily seen. It is especially indicated when there is not compensatory hypertrophy of the left ventricle; and it increases the force of the heart when it tends to become weak and dilated.
5. In cardiac dilatation, with or without hypertrophy, with or without cardiac degenerations or sclerosis of the muscular structure, it is indicated.
6. It is indicated in all cardiac affections in which there is a tendency to dropsy.

HYPODERMIC INJECTIONS OF CHLOROFORM.—In a paper read at the Académie de Médecine of Paris, on February 12, 1884 (*Brit. Med. Jour.*), M. Bouchard stated that in rabbits the subcutaneous injection of one cubic centimetre of chloroform was always followed by drowsiness, diminution of the temperature, albuminuria, and death within forty-eight hours. The albuminuria appeared two hours after the injection, and was generally accompanied by hæmaturia. In dogs the same

phenomena were produced by larger doses. After death the kidneys were found intensely congested, but the epithelium was healthy, and there was no increase of urea in the blood. The symptoms were apparently due to the action of chloroform upon the kidneys themselves, or upon the central nervous system. Albuminuria was also observed in rabbits after inhalations of chloroform. In man, temporary albuminuria may follow inhalations of chloroform, but it has never yet been noticed after the subcutaneous injection of that substance. M. Bouchard thought that repeated injections of three cubic centimetres might prove dangerous.

THE DANGER OF LARGE DOSES OF QUININE.—At a late meeting of the New York Clinical Society (*N. Y. Med. Jour.*), Dr. A. A. Smith read a paper on this subject and also one written by J. W. Wright, in which it was shown that large doses of quinine have a deleterious effect on the heart, through the nervous system. This is especially the case in typhoid fever, where, through long continued pyrexia, the heart became weak or degenerated.

PHYSIOLOGICAL ACTION OF COFFEE.—(*Brit. Med. Jour.*) According to the result of experiments recently made by Messrs. Coury and Guimaraes to ascertain the precise physiological action of coffee, that beverage is not a preventer of tissue-waste. The maintenance of nutrition is, no doubt, improved by its consumption, as Gubler asserted, but simply because it involves an increased assimilation of nitrogenous food through improving the appetite, when not taken in excess, and thereby encouraging its consumer to take nutritious food.

ANÆSTHESIA BY THE MIXED METHOD.—The practice of giving a hypodermatic injection of morphine and atropine (*Med. News*) is very highly spoken of, and was thoroughly tested by some of the best foreign surgeons, and by a few, only, of American surgeons. It is claimed that this "mixed method" is much safer than to give the anæsthetic alone. The stage of excitement is very slight; profound anæsthesia is obtained in about three minutes, and vomiting rarely occurs.

Action of Remedies.

THE PHYSIOLOGICAL ACTION OF DIGITALIS.—In the October issue of the *American Journal of the Medical Sciences* Dr. Samuel Nickles, of Cincinnati, summarizes the pres-

ent state of our knowledge of the physiological action of digitalis, and his paper is specially instructive, since the doctrines now universally taught regarding the action and use of digitalis differ in a number of important points from those held two decades ago. Then we were taught that digitalis is essentially a sedative affecting strongly the nervous system, thus causing feeble and slow heart action. Now the latest authors teach that the nervous system is only secondarily affected, while the heart is directly influenced, its action becoming more powerful though slower. Twenty years ago we were taught that digitalis is a diuretic directly acting upon the kidneys, thus producing in many diseases a greater secretion of urine. To-day we are told that digitalis does not act upon the kidneys at all, and only secondarily affects the secretion of urine by causing a change in the systemic circulation. In one point there is universal agreement, that digitalis recklessly used may produce the most disastrous effects, and that these may occur quite unexpectedly in consequence of *cumulative action*.

But not only in regard to the *modus operandi* do present authors differ from their predecessors, but also as to the therapeutic indications. Two decades ago digitalis was held to be indicated when the heart's action is too powerful; now we are informed that it is useful only when the heart's action is too feeble. Then authors thought that digitalis will control and hence favorably influence a hypertrophied heart, while present writers contend that every disease of the heart attended with excessive action is aggravated. It was held for a century that digitalis, though not eminently useful, is still often of great service in dropsy dependent upon organic disease of the kidneys; but now we hear that in diseases of the kidney attended with diminished diuresis, it is almost always useless, and always exceedingly dangerous.

ANTIFEBRILE REMEDIES—THEIR COMPARATIVE EFFECTS.—Prof. DeRenzi (*Chicago Med. Jour.*, Nov., '84) reports some interesting studies made in his clinic in Italy, concerning the relative power of antifebrile remedies. In the fever of phthisis he has used kairine, phenic acid, resorcine, and benzoic acid. Of these he found that kairine had the power of lowering the temperature more quickly and powerfully; but this lowering is not lasting. The phenate of soda lowers the temperature, as the salicylate of soda, for a

longer time; is tolerated better, and does not produce such abundant sweats as kairine; but the greatest diminution of temperature obtained with the phenate of soda and the salicylate of soda is scarcely half of that obtained with kairine. The antifebrile power is more marked in the phenate than the salicylate. The phenate is given in capsules containing twenty centigrammes of the remedy. These are given five or six a day. Of the salts of quinine, the arseniate has pyretic effects superior to the sulphate. Benzoic acid and resorcin produced only slight lowering of temperature; the phenic none.

For the fever of pleurisy the remedies generally used are kairine, salts of quinine, and the phenate of soda. Kairine has little effect. The salts of quinine, especially the arseniate, gave the most marked results. The most energetic remedy is the phenate of soda.

Several antifebrile remedies have been urged in the treatment of typhoid fever and the febriculæ. The cold pack always reduced the temperatures of forty degrees centigrade to normal. In the febriculæ, quinine and salicylic acid were also used, but with little effect. In typhoid fever a two-per-cent. carbolic acid spray was used every two hours. In some cases this lowered the fever, and in others it shortened the disease.

In asthenic pneumonia alcohol is always used. This both supports the patient and lowers the temperature. Quinine and kairine were given to lower rapidly and strongly the very high temperature.

Practice of Medicine.

OPERATIVE TREATMENT OF PULMONARY CAVITIES.—Dr. F. Bull, of Christiana (*British Medical Journal*), presents the following propositions:

1. Abscesses of the lung, which can be diagnosed with certainty, and are so situated that they can be opened through the chest-wall, should be treated in the same way as pleural empyema.

2. The condition is the same with regard to limited gangrene of the lung. If several gangrenous foci exist, each one must be treated separately.

3. Echinococci and foreign bodies in the lungs are to be treated in a similar manner.

4. In bronchiectasis the formation of a pulmonary fistula is indicated only when the accumulation of stagnant matter in large cavities essentially contributes to the deterioration of the patient's health.

5. In rare cases of tuberculosis, where a large cavity is the predominating condition, the cavity may be laid open with the view of improving the condition of the patient.

6. The operative puncture of a pulmonary fistula is justifiable as a palliative measure.

7. In cases where the diagnosis cannot be arrived at, exploratory puncture is certainly of much value. Positive as well as negative results may be derived from it.

8. Adhesion of the layers of the pleura ought not to be insisted on as an absolutely necessary preliminary to the opening of pulmonary cavities.

9. Amyloid degeneration is not an absolute contra indication to a palliative operation.

10. The use of the thermo-cautery is to be recommended both for the opening of cavities and for the destruction of diseased portions of lung tissue.

THE MORTALITY FROM CONSUMPTION.—Dr. J. L. Davis (*Cincinnati Lancet*, November 22, 1884) concludes a paper as follows:

1. Pulmonary consumption is now, and as far as authentic medical record reaches, has always been the most prevalent and fatal of diseases.

2. The death rate from this disease varies in different countries from twelve to twenty per cent. from all causes. This mortality has not changed materially in modern times. Deviations from the average seem to be due chiefly to inaccuracy of statistics, carelessness in diagnosis, and indefinite nomenclature. Pulmonary consumption is singularly free from the fluctuations depending on temporary and transient causes which affect other diseases.

3. No age is exempt from this disease. Statistics show that it is most fatal between the ages of twenty and forty.

4. The female sex is more susceptible than the male to the disease in the ratio of one hundred and twenty to one hundred.

5. Crowded cities and habitations show a larger mortality from this disease than prevails in less crowded localities.

6. Indoor occupations and those vocations which necessitate a cramped position or sedentary habits, favor the occurrence of pulmonary consumption.

Pathology.

THE OCCURRENCE OF ASCARIS MYSTAX IN THE HUMAN BODY.—Dr. Howard A. Kelly, of Philadelphia, reports, in the October number of the *American Journal of the Medi-*

cal Sciences, a case of the occurrence of this rare worm in the human body. It is believed to be the ninth case on record, and the first observed in this country. Dr. Kelly believes that it is simply an accidental parasite in the human body, and that it is probably but one of the rarer of the risks from using food contaminated by filth.

Prof. Johne, of Dresden (*Deutsche Land, Presse; N. Y. Med. Jour.*), reports quite a number of cases of tuberculosis in hens, which were traced to their being fed by a person having the disease, and who had the habit of giving the hens meat which she had chewed up for the juice. She was very fond of the hens, and in summer weather they would congregate about her, and frequently would pick up the sputa which she had coughed up. The liver, kidneys, and intestines were mostly affected.

THE RELATION OF MICROCOCCIT TO WOUNDS, ABSCESSSES AND SEPTIC PROCESSES.—Dr. W. W. Cheyne (*Brit. Med. Journal*, Oct. 4), concludes a series of papers embodying the researches of the Scientific Grants Committee of the British Association. The conclusions are as follows:

1. There are various kinds of micrococci found in wounds treated antiseptically, differing markedly from each other in their effects on animals. They agree in growing best at the temperature of the body, and in causing acidity and sweaty smell in the fluids in which they grow. The experiments show that the cultivations may be carried on in fluids with accuracy, provided the precautions mentioned be observed.

2. The micrococci tested in these experiments, grew best in materials exposed to oxygen gas. They grew only with difficulty in the absence of oxygen. Eggs were not good pabulum.

3. Their effect on animals was not altered by growth with or without oxygen.

4. The effects of these micrococci on rabbits and man were not similar, some of the most virulent forms for rabbits causing no deleterious effects in wounds in man.

5. The kidney is apparently an important excreting organ for organisms.

6. Organisms not capable of growing in the blood may yet cause serious effects by growing in the secretory canals. This may explain some cases of pyelitis.

7. Where an organism is not markedly

pathogenetic, it may be necessary to introduce a large quantity before morbid changes are set up.

8. Suppuration is not always due to micrococci; it may be caused by chemical irritants, such as croton oil.

9. Micrococci are always present in acute abscesses, and are probably the cause of them.

10. In some cases the micrococci are the primary cause of the inflammation and suppuration, and in pyæmic abscesses generally they begin to act after inflammation has been previously introduced.

11. This inflammation may be caused by an injury, by the absorption of chemically irritating substances from wounds by cold, etc.

12. There are several different kinds of micrococci associated with suppuration.

13. Micrococci cause suppuration by the production of a chemically irritating substance, which, if applied to the tissues in a concentrated form, causes necrosis of the tissue, but if more dilute causes inflammation and suppuration.

14. The conditions of wounds and abscesses are not the same, inasmuch as in the former there is opportunity for mechanical and chemical irritants to work.

15. There is reason for denying the existence of antiseptic suppuration.

16. Tension may also cause suppuration, but it is most frequently aided by the growth of micrococci. These organisms need not be of a very virulent kind. It is also probable that the products of inflammation are themselves irritating and capable of exciting or keeping up inflammation.

17. The micro-organisms of septicæmia, of pyæmia, and erysipelas, are different from one another, and from those of abscesses. In erysipelas the micrococci grow in the lymphatic spaces. In pyæmia they grow in the blood to form colonies and emboli. In septicæmia they may only grow locally, the symptoms being due to the absorption of their ptomaines: or if they grow in the blood they do not form colonies and emboli. Septicæmia may also be due to other organisms besides the micrococci.

18. There are no facts to support the view that it is the same micrococcus which under different circumstances causes these various diseases.

PTOMAINES—THEIR ORIGIN, NATURE AND REACTIONS.—Prof. V. K. Anrep, of St. Petersburg, concludes an elaborate original study

of these substances (*London Medical Record*) thus :

1. Putrefaction, fermentation, and other as yet indefinable alterations of albuminous substances, are accompanied by the generation of alkaloidlike bodies, ptomaines.

2. The number of ptomaines is very great, and their chemical and poisonous properties are very different.

3. There are known, fixed and volatile, fluid and solid, amorphous and crystalline ptomaines.

4. Almost all ptomaines change red litmus to blue and syrup of violets to green.

5. Like alkaloids, they form salts with acids, the formation proceeding without giving off water.

6. In regard to their solubility, ptomaines behave very differently, some of them being soluble in water, others in ether, alcohol, benzine, chloroform and amyl alcohol. Ptomaine salts are easily soluble in water.

7. Some ptomaines are tasteless and colorless ; others possess an intense bitter taste or aromatic sweetish odor, and others again evolve a cadaveric odor or one resembling coniine or nicotine. When treated with acids, they sometimes emit a pleasant floral odor.

8. Ptomaines obtained from rye meal which has been subjected to fermentation, give the same reactions as the ptomaines of any other extractions. These reactions are as follows:

(a) A solution of iodide of potassium with biniodide of mercury produces a whitish precipitate in a ptomaine solution slightly acidulated with hydrochloric acid. Twenty-four hours later, microscopical examination detects that the precipitate consists of minute prismatic crystals. (b) A solution of iodide of potassium, with iodine being added to an acidulated ptomaine, produces either a flocculent or finely granulated red-brown precipitate which is insoluble in hydrochloric acid. (c) A solution of phosphomolybdenate of soda gives a yellowish amorphous precipitate which is insoluble in diluted nitric acid, but on addition of liquor ammoniæ in excess at first takes a blue-green color and afterwards dissolves, giving either a bright blue or green solution. The blue color is mostly observed during the first stages of putrid decomposition. The original precipitate produced by phosphomolybdenate of soda on being heated, assumes a green color, without any addition of ammonia. (d) Phosphowolframic acid gives whitish or grayish precipitates which are insoluble in diluted sulphuric acid and hydro-

chloric acids, but easily soluble in ammonia. (e) A solution of tannic acid gives a white precipitate ; the latter does not appear if tartaric acid be present. (f) A solution of iodide of potassium with iodide of bismuth in presence of dilute sulphuric acid, gives a yellowish precipitate, part of which passes into solution on heating, and reappears again on cooling. (g) A solution of iodide of potassium with iodide of cadmium sometimes produces precipitates which are soluble in excess of the reagent, and which by degrees assume a crystalline structure. This reagent precipitates the products of the first stages of putrefaction ; later on in the course of the latter there appear some products which are not precipitated by iodides of potassium and cadmium. (h) In some cases a solution of corrosive sublimate gives precipitates which gradually take a crystalline structure ; in other cases, however, ptomaines are quite indifferent to these reagents. (i) A solution of chloride of platinum gives with some of the ptomaines, precipitates which are usually crystalline and soluble in hydrochloric acid, and consist of a double salt (chloride of platinum plus chloride of ptomaine). Similar double salts are given by chlorides of gold and zinc.

9. Ptomaines are optically inactive bodies

10. The color reactions of ptomaines are as various as those of vegetable alkaloids.

Public Health.

CANNED GOODS.—Dr. J. G. Johnson, of Brooklyn, New York (*Sanitarian*), read a long and interesting paper on this subject before the New York Medico-Legal Society. The doctor was called to treat a family of six persons who were poisoned by eating canned tomatoes. Upon investigation he discovered that the tops of the cans were soldered by aid of a flux of muriate of zinc. It was thought the poison might have been verdigris (acetate of copper) from the copper kettles used in canning establishments, but they did not have a green color. The caps to canned goods should be soldered with resin flux, which shows plainly, and none others should be used. Goods that have spoiled are sometimes "reprocessed" as it is called. These cans always have two solder holes on top and should be rejected or sent to the health officer, with the contents. "Standard" or first-class goods have the name of factory, and also that of the wholesale house which sells them. Cans not so marked should be rejected.

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Tubercle—Its Anatomical Forms, Evolution and Nature.

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IN MY work on Bacillary Phthisis I have shown that phthisis is a virulent disease, due to a micro-organism, special, specific, always unavailable in animals; transmissible from the sick man to the well man by way of direct contagion; often propagated by heredity; very frequently localized in a single organ; and susceptible of cure without compromising the rest of the organism. This definition will apply to tubercle also.

To justify our definition, which is purely etiological, we have to demonstrate the dominant facts, comprehensive of the whole question, viz.: First, that the bacillus produces the entire series of lesions amenable to tuberculosis; second, that tubercle, considered solely from an anatomical point of view, abstraction being made for the bacillus, is a lesion susceptible of divers interpretations, and presents no veritable characteristic. But before establishing these premises, and as prefatory to the discussion, we must give the descriptive anatomy of tubercle.

ANATOMICAL FORMS OF TUBERCLE.

Tubercle is formed by a prominence distinctly circumscribed, visible to the naked eye, designated under the name of miliary granulation, or true tubercle; this intumescence is itself composed of little microscopic foci, each formed by a close, clearly defined mass of cells. These cell-agglomerations, microscopic nodules, are sometimes imbedded among the inflammatory products in such a way as to appear very indistinct; they are confounded in a diffuse lesion called tuberculous infiltration.

I. *Histological Characteristics of the Primitive Tubercle.*—The microscopic nodule has

been considered as a neoplasm composed of cells and nuclei, of new formation, destitute of blood-vessels (which was considered an important sign), and containing (what was thought to be certainly distinctive) certain cells called giant cells, namely, blocks of protoplasm possessing from twenty to one hundred nuclei. But it was soon perceived that this structure is far from being so simple and so clearly defined, and that no one of these elements is characteristic.

(a) *Epithelioid cells.*—The nodules of miliary or primitive tubercle, regarded in their fresh state, consist of a considerable number of embryonic cells which occupy the periphery, and are furnished here and there with prolongations. The cells which compose this embryonic layer resemble, in part, *endotheliums*, and possess large oval nuclei with brilliant nucleoli. Others—and these compose the larger number—remind you of *epithelial cells*; they have been called *epithelioids*; in fine, a certain number of cells, intercalated between the preceding, present the texture of white globules; these lymphoid cells occupy principally the periphery of the nodule.

(b) *Giant-cells.*—Besides these lymphoid corpuscles and the epithelioid cells which constitute the principal mass, two or three giant-cells may be found in the center of the nodule, or a little nearer its surface.

The giant-cells form an element of considerable consequence in the structure of tubercle. Indicated by E. Wagner, studied with great care by Schuppel, these giant-cells are generally roundish, or, it may be, are provided with protoplasmic prolongations which put them in relation with the embryonic cells. This element has had an inordinate importance assigned to it in the characterization of tubercle; to such a degree, in fact, that the tuberculous nature has been denied of every product not containing cells of this kind.

Authorities have nevertheless been compelled to concede that giant-cells are found in other pathological products, and even in normal tissues. Robin has observed them in the physiological state in the provisional

* Translated by Dr. E. P. Hurd, Newburyport, Mass.

callus of bone; Friedlander has found them in the cavities of the uterine sinuses at the point of insertion of the placenta. They have been seen in the peritoneum after the insertion of foreign bodies in its cavity (Heidenhaim); in pneumonia (Friedlander); in syphilitic endarteritis (Hubner); in gummy tumors (Baumgarten); in the exuberant granulations of wounds (Buhl and Jacobson); in sarcomatous tumors, in the foci of actinomyces (Johnes, Pflug). Despite the multiplicity and the commonness of conditions which favor their development, these giant-cells constitute a most important morphological element of the tubercle nodule.

(c) *Absence of Vascularity*.—Another characteristic of tubercle is the absence of vascularity. It is as much as ever if it be penetrated by a few capillaries coming from vessels compressed at the periphery. It should be remarked, however, that the vessels which surround the tubercle may become the seat of an inflammation, and that this endarteritis may lead to obliteration of the vessel, whence results that the center of the tubercle speedily degenerates, becoming cheesy.

(d) *Bacilli*.—But the dominant characteristic, without which the tuberculous nature cannot be affirmed, is the presence of the bacillus, which is found generally in the giant-cells, sometimes also in the vicinity of these cells.

II. *Caseous tubercle*.—Tubercle has a fatal tendency to caseous degenerations, and this is the pathognomonic criterion which has given rise to this definition of tubercle: "A cellular nodosity, deprived of blood-vessels which at a given moment of its development becomes cheesy."

It is nevertheless necessary to remark that this degeneration does not exist constantly in man, and but rarely in animals.

The metamorphosis commences as soon as the tubercle granule has arrived at a certain volume; that is, as soon as the microscopic nodules which constitute tubercle have attained a certain multitude. Then there may be seen, as Laennec shows, "a little yellowish white and opaque point develop in the centre of each tubercle and spreading from centre to circumference invade the whole of the tubercle in the course of its growth." At the end of a certain time the invasion of the yellowish matter becomes complete, and the entire group forms now a homogeneous mass of yellowish-white color, and a texture a little less firm than before. This is yellow tubercle; the yellow infiltration is constituted by the

same transformation as that of the disseminated tubercles; the gray infiltration is, according to Grancher, complicated with inflammation.

The miliary granulations which may remain in the primitive state, according to Robin, often show a yellow and opaque central spot clearly indicative of their transformation into crude yellow tubercle.

Tuberculosis thus comprehends, according to Laennec, under the varied forms of granulation, isolated tubercles, agglomerated and infiltrated in the tissues, one and the same lesion which infallibly terminates in cheesy transformation; that is to say, by fatty degeneration and a process of ulceration. The cause of this fatal transformation resides in the wretched vital condition, in the instability, the inherent weakness of the tubercle cells, and especially in the fact of their insufficient nutrition, by reason of the poverty of blood supply, which is partially or totally lacking. This then accounts for the atrophy and fatty transformation of the cells.

Later, especially when it is a case of the large tubercle agglomerations, arrives the period of softening, which in the parenchyma of the lungs leads to the formation of tuberculous cavities, and on the surface of mucous membranes in general, to a state of ulceration; here, then, are the two anatomical phases or forms of tubercle. There is still a third form.

Fibrous tubercle.—Having once arrived at its development, tubercle tends, unfortunately, to caseous degeneration and to destruction of the diseased organ. But this is not always so.

There has been recognized from earliest times, a tendency to fibrous transformation which may in certain conditions and in certain regions lead to cure. In fact, as the labors of Grancher and Benault show, tubercle, whatever may be its form, contains always in germ a fibrous zone, which, if the tubercle develops slowly or stays its progress, gets the advantage of the caseous destructive process and becomes a process of natural cure.

Long ago pointed out by Boyle, who described large fibrous granulations, by Cruveilhier, and recently by Langhens, the fibrous state, or state of sclerosis, was considered only as a chance occurrence, as a lucky termination of the tubercular evolution. It is known to-day that this sclerosis may pertain in a primordial sense to the tubercle nodule;

that the centre of the granulation far from being softened, may consist of a sort of multi-lobed fibrous pearl, which corresponds to the initial granule and which is surrounded by a shell of irregularly lamellated fibrous tissue, making part with it, and spreading to the periphery by an embryonic zone. This is the fibrous or fibro-caseous tubercle of Grancher.

EVOLUTION OF TUBERCLE.

I. *Histogenesis*.—The question of the starting point of the granulation has been variously answered. While Virchow holds that it originates in the connective tissue (which is undoubtedly an error), Cornil and Ranvier, as well as Rindfleisch teach that it arises from the epithelial cells, those of the pulmonary alveoli, for example; Colberg and Aufrecht assign to the great cells and to the epithelial cells their origin in the tunica adventitia of the blood vessels. What is certain is that when the granulation is situated around a blood-vessel, endarteritis ensues, and giant cells are produced.

It has been affirmed, moreover, that the tubercle granule, and particularly the giant cells, originate in the lymphoid cells. The development of the granule from the leucocytes of the blood seems very probable, especially when we consider the part which these take in inflammatory new formations. The researches of Zeigler on the production of endothelial cells at the expense of the migrating leucocytes, render this opinion admissible. Wherever formed, the granulation presents a central zone with granular detritus, and a peripheral zone formed of crowded embryonal cells, which are diffused widely among the surrounding tissues. In the centre, which are ordinarily deprived of vessels, are found the giant cells.

By the side of these adult granulations, appear, according to Grancher, young microscopic nodules, and irregular masses of cellulose-embryonal tissue, having the same structure and the same destiny as tubercle.

The growth of tubercle by proliferation of its elements cannot but be very much restricted by reason of the instability of those elements. The increase of size of the nodosities takes place by the addition and juxtaposition of new nodules formed in the vicinity.

I. *Localized Tuberculosis*.—Tuberculosis begins ordinarily in a local modification, and the development of primitive tuberculosis may easily be distinguished, even with the

naked eye. Frequently an inflammation ushers in the process, and tubercle is grafted on as an after result. This very fact gave origin to the thesis (long maintained with much pertinacity) that tuberculosis is not a specific infectious disease, but that it is developed solely at the expense of a chronic inflammation, in certain individual conditions. Actually, it is the opposite which is true; the primitive phlegmasia is itself the result of the tuberculous virus which produces the nodules.

Thus localized tuberculosis may remain a long time confined to a single organ; it may even become encysted or definitely circumscribed by reason of favorable hygienic conditions.

The localization takes place especially in the lungs, the lymphatic glands, the osseous system, more rarely in the genito-urinary organs, and the digestive tube.

The local march of tuberculosis goes on in such a way that the tubercle at the periphery of organs gives rise to new nodules.

At the circumference of ancient cheesy foci, ulcerated or cavernous, you may see a grayish zone which consists of tubercle granulation tissue with here and there large nodules interspersed; a little farther off disseminated nodules with healthy tissue between them. Later on each tubercle becomes the starting point of new eruptions; the granulous tissue, the nodosities, and the remainder of the tissue of the organ, whose place has been taken up by the new growth, fall into a state of caseiform necrosis, and there may result therefrom a wide spread destruction; but here, contrary to what takes place in the case of tumors, the regional infection does not start from the tubercle cells, but is produced by the bacillus.

II. *Ways of Transmission*.—The channels of transmission by which the tuberculous virus obtains extension are chiefly the lymphatic vessels. By these ducts the infection progresses, and there results a secondary tuberculosis of the neighboring lymphatic glands; then a neighboring organ is gained, a serous membrane for instance.

When the lymphatic ganglionic system appears affected primitively, it is rarely that there will not be found the presence of tubercle latent in the vicinity. Primitive scrofulous adenitis is not more common than primitive syphilitic adenitis, and when the glands are invaded by scrofula, it is generally the case that the virus has smitten them indirectly.

By the lymphatic passages, the tuberculous

affection may finally invade the entire sanguiferous system. Ponfick has found tuberculosis of the thoracic duct, accompanying general tuberculosis.

On the other hand, the tubercle formation may have begun in the blood-vessels. Mugge has called attention to the frequent development of tubercle nodules in the inner membrane (intima) of the blood-vessels, and especially of the pulmonary veins, in disseminated tuberculosis of the lungs. Weigert has succeeded in closely following the course of this venous tuberculosis, and in showing that many outbreaks of acute miliary granulations commence in this way.

The miliary eruption is primitive, or else it is grafted upon a chronic tuberculosis which has remained local and latent. In general, a caseous deposit (foyer) is formed in a lymphatic gland or at the apex of a lung, from whence the general tuberculosis takes its start (Buhl). Often in these cases of sub-acute miliary tuberculosis, tubercles are found incompletely developed; the last eruptions consist of rounded, agglomerated cells, and the giant cells are often wanting.

IV. *General Tuberculosis*.—From all that has gone before, it may be inferred that the infection of the organism may, by means of the specific micro-organisms, engender all the pathological manifestations which complete and constitute the specific unity of the disease.

Is it asked, in what consists the baneful action of the bacillus? It must be borne in mind that the primitive effect of the bacillus is purely local. Tuberculosis does not belong to the series of general infectious diseases, in which the systemic invasion predominates over the local state. In the great majority of cases it is the local manifestation which constitutes the essential point. The bacillus provokes special lesions in the place where it implants itself, and it is not till these lesions trouble the functions of the organ that the rest of the organism suffers from them.

It is quite clear that if the tuberculosis localizes itself in the lungs or in the encephalon it compromises life through the anatomical relations of these organs with the entire economy. If the organ affected is of second rank the local focus of tubercle may become the starting point of a veritable general infection by the channels which I have indicated; in which case one or the other of these alternatives follows; either the destructive agent takes possession secondarily of the vital organs, such as the lungs or brain, which

were intact at the beginning of the morbid process, or else the parasite invades the greater part of the organism; all the viscera, all the tissues, the serous and mucous membranes and the lymphatic apparatus. In both cases we can no longer expect arrest in the progress of the disease; all clinical experience negatives any such hope.

EVOLUTION OF PULMONARY TUBERCULOSIS.

Pulmonary tuberculosis commences generally in the bronchi, or the peri-bronchial tissue, and progressively involves the lungs. Often, however, a few microphytes in the lung itself are sufficient to produce an inflammation which rapidly takes on the tuberculous character, undergoes rapid extension, and takes on a caseous nature. Regarded in a general manner, divers states may be noted which are susceptible of recognition from a clinical point of view: these pertain to the tissue invaded, to the anatomical modifications which these tissues almost inevitably undergo, *i. e.*, crudity, caseification, and necrotic destruction—cavernous and ulcerous—finally to fibrous or sclerous transformation.

I. *Bronchitis*.—Tuberculosis commences ordinarily in the wall of one or more bronchioles, and especially of those which occupy the apex of a single lung. There has been a great deal of discussion about this predilection of tubercles for the lobules of the apices. Is it in consequence of the minimum participation of the latter in the respiratory function? In other words, is it due to the relative immobility of the lungs at these points, offering a more favorable place for the bacilli to find lodgement? It may be that an affirmative answer is warranted to these questions, a further consideration of which will be had further on.

II. *Peri-bronchitis*.—From the walls of the bronchi, the tuberculosis infection spreads to the periphery, and the tuberculous bronchitis is transformed into peri-bronchitis. From this primitive focus where soon a superficial ulceration is established, the infecting virus gains rapidly by the intermediation of the air, other bronchi, and the disease extends farther and farther. In this peri-bronchial centre often recognizable by the naked eye, you will often detect the lumen of the bronchus, in the midst of little grayish masses, which soon turn yellow. Ordinarily these little nodules undergo partial fusion; finally the fusion is complete. The bronchial tube becomes then completely obliterated by the tuberculous mass; or (it may be) the peri-bronchial nod-

ule becomes necrosed in its centre and its cells are destroyed. The bronchus then dilates and forms a small irregular cavity; this is the first degree of cavernous formation.

II. *Lobular Pneumonia, Atelectasis*.—The alveolar tissue is involved in its turn and undergoes modification in different ways.

Pulmonary Atelectasis.—At first the permanent obliteration of a bronchus speedily entails the collapse of the lobule corresponding to the bronchus, and we have pulmonary atelectasis.

Caseous Lobular Pneumonia.—The collapsed lobule is not slow to take on inflammation, and especially caseous inflammation; this is caseous lobular pneumonia.

The alveoli are then filled with pus corpuscles and large epithelioid cells which come without doubt from the alveolar epithelium. Finally the caseified tissues fall into a state of necrosis and form in their turn new cavities.

IV. *Caseous Pneumonia, Gray and Yellow Infiltration*.—In other cases the centres of caseated lobular pneumonia end in being juxtaposed and fused together; the infiltration extends more and more, so as to form the gray infiltration of Laennec (vitreous infiltration of Irancher) then the yellow infiltration which indicates the caseous degeneration of this infiltrated tuberculous mass. It is also by reason of this confluence of lobular pneumonias that there finally results the formation of caseous lobar pneumonia, which it will not do to confound with gray or yellow infiltration; the latter being nothing but multiple tuberculosis, while caseous pneumonia is inflammation grafted on granular tuberculous deposit.

V. *Caseous followed by Calcareous Degeneration. Ramollissement*.—The caseous foci which are easy to distinguish by their yellow color, by their granular and fragile consistence, take their origin either in lobular pneumonia or in lobular pneumonias fused into a single mass, which is easily recognized by its irregular contours.

This mass consists in the aggregate of tuberculous products, become fatty and desiccated, sometimes also mingled with deposits of calcareous salts capable, when proceeding from the centre, of invading the diseased focus in its entirety and in such a manner as to transform it into a hard stony concretion. We have here one means of cure, for when this calcification takes place the chalky substance which remains performs the office of an inert material in the lungs. It sometimes happens that around this pulmonary concre-

tion foci of softening are found which enable the products of chalky transformation to become detached and to be expelled.

VI. *Formation of Cavities*.—When the great centres of caseification, instead of becoming desiccated undergo softening, pulmonary cavities are formed. The cheesy masses liquified and transformed into pus, acquire corrosive properties, make irruption into one or more bronchi, and are expectorated, leaving in their place an empty cavity or vomica, which continues to fill with a purulent secretion. The internal wall of the cavity is at first irregular, corrugated and jagged. Often several cavities fuse together and there result excavations with irregular anfractuosités.

These cavities have always a tendency to gain the periphery; sometimes it happens that they are arrested by a sort of interstitial sclerosis which ends by enclosing the cavity in a capsule of connective tissue. When the contents of this cyst-like pouch are destroyed by suppuration and expectorated, the wall of the cavity, at first villous, is transformed into a smooth surface, which still presents here and there caseopurulent and granular deposits, easy of removal.

Vessels.—During the destructive process which leads to the formation of cavities, the blood-vessels generally resist. You find them in the midst of a bundle of connective tissue crossing the cavity, and a section of these vessels shows thickening as well as obliteration of their caliber.

Aneurisms.—At other times from the internal wall of the cavity large vessels proceed which present aneurismal dilatations, and which give rise to profuse and irremediable hemoptises. These aneurisms are of frequent occurrence.

Dilated Bronchi.—Besides the parenchymatous cavities, you find also cavities due to dilatation of the bronchi. These dilatations may acquire a great volume and are recognizable with sufficient ease; you can see the wall of the different branches penetrate without interruption the wall of the pulmonary cavity; under the microscope you may often recognize, upon the internal surface of these dilated bronchi, epithelial cells with vibratile cilia.

VII. *Interstitial Sclerosis*.—There sometimes eventuates, alas too rarely, a tendency to a delimitation of the lesion; a fibrous transformation replaces or arrests the caseification and ulceration. Without concerning themselves with the fibrous tubercle described by

Grancher, and which constitutes the sole mode of cure in the case of crude tubercle, you sometimes observe around the tuberculous infiltration, particularly in spots which are the seats of a destructive process, when the liquefaction has not been too rapid, a formation of neo-fibrous tissue. This may lead finally to retraction of the lung and to the formation of solid cicatrices which belong exclusively to chronic tuberculoses, and to lobes which have for a long time been under invasion, the upper lobes for example.

Pulmonary Induration.—These fibrous bands form ordinarily a pigmented induration of brown or black color; succeeding vast destructions of the pulmonary tissue, they may reduce the tuberculosed lung to half its natural volume. These condensed fibrous bundles form, with the cavities and the bronchial dilatations, the anatomical substratum of those great pulmonary retractions, in which the cavities are ordinarily formed at the expense of the pulmonary tissue destroyed and by the dilated bronchi; the bronchial ectasy resulting from traction of the cicatricial tissue on the walls of the bronchi.

Curative processes resulting from sclerosis—Rarity of cure.—These fibrous formations, followed by retraction of the lung indicate a curative tendency. If this kind of cure is not more frequent it is because, from each focus of tubercle, the infectious matter escapes, and invades new bronchi in such a manner as to propagate and extend the disease. By the same mechanism, tuberculosis, localized at the apex, gains little by little the inferior lobes. At last the cough causes expulsion of the infectious matter into the trachea, whence it may gain the other lung, and when both lungs are invaded a destructive process results of such extent as to expose the respiratory function and compromise life.

VIII. *Bronchitis and Catarrhal Pneumonia.* Besides the specific processes, phthisical lungs may become the seat of simple inflammations, such as bronchitis, tubular pneumonia, more rarely simple pneumonia. These inflammations are without doubt the result of the irritating properties of the bacillus tuberculosis, perhaps also, of pus or other irritant liquids, or even of necrosed, gangrenous particles which may in their turn favor the development of the inflammation.

IX. *General Miliary Tuberculosis.*—I shall not speak here of the miliary tubercles which so often accompany other lesions. They will be described under the head of tuberculo-miliary phthisis.

NATURE OF TUBERCLE IN GENERAL.

The description of tubercle in general, and of pulmonary tubercle in particular, is completed. It now remains to study its nature, that is to say, its relations to other morbid anatomical products.

Is there any characteristic which enables us to distinguish tubercle from certain results of syphilitic lesions, or of glanders? None at all. All histologists have admitted this. Can we distinguish tuberculosis from the inflammatory processes which, without preceding it, often accompany or succeed it? Is tubercle itself of inflammatory nature? It is important for us to settle these points before attempting to discuss the numerous opinions which have been advanced relative to this histological morbid product. In presence of the disease, once recognized, and before formulating the indications and the remedies, we naturally ask ourselves the questions: what is tubercle? Is it a primitive heterogeneous clearly defined anatomical product, as Laennec taught? In this event, medicine is disarmed by fatalism; tubercle is a final product, not farther analyzable or resolvable. Is it a common inflammatory lesion? Then let us welcome Broussais, and antiphlogistic therapeutics. Is it the natural but inevitable effect of a special destructive agent? Henceforth the antiparasitic method of treatment will prevail. The most humble practitioner is interested in the solution of these grave problems, and would fain have some clear, logical and systematic guide, whose indications he may follow, though he may not be able always to attain them. What matters it to him—in fact—the form, the extent, the histological seat and the connections of tubercle? It takes an experienced microscopist to distinguish this morbid product from similar neoplasms; in a word, to make the diagnosis of dead tubercle, just as it takes a clinician to recognize tubercle during life. Now the pathological anatomy of tubercle has undergone such variations the past six years, as to bring discouragement to the most steadfast spirits; medicine has more than once gone through an entire revolution, and we have not yet witnessed the end of important changes; the discovery of the microphytic diseases will certainly constitute a new era in the history of medicine.

We will now examine the different lesions which constitute tubercle, and first of all we will take up the miliary granulations, then tubercle, properly so-called (crude tubercle,

yellow tubercle, pseudo-tubercle), and, finally, the caseous degeneration, which is the consequence, and to which all tuberculous formations tend.

1. Nature of the Miliary Granulations. (a) It is a Special Product.—Boyle, who wrote ten years before Laënnec (1810), considered the granulations as the sign of a particular kind of phthisis, distinct from tuberculous phthisis. This opinion has received the support of Charles Robin, who makes the remark that the granulation does not undergo the same evolution as tubercle, that it tends to induration, to sclerous transformation, and often stays its march before passing to the stage of caseous degeneration.* This observation, which certainly applies to a great many cases, is not rigorously exact, for the granulations may undergo softening in the centre. Empis, also possessed of this histological notion, regards the gray granulation as the sign of a special disease, entirely distinct from tuberculosis, and presenting the infectious character; the latter view has received justification since Koch's discovery.

(b) The Miliary Granulation. It is Tubercle.—Verhien, instead of regarding the gray granulation as a special morbid product, declares it to be the type of tuberculosis, and the exclusive type; all that which in phthisis is produced apart from the granulation, all that accompanies it, all that has not the form of the granule is of inflammatory origin, and may be looked upon as accidental.

(c) The granulation is an inflammatory product.—After having received the dignified appellation of special neoplasm, then the exclusive honor of tubercle, the miliary granulation was next engulfed with tubercle itself in the plebeian class of the circumscribed inflammation of the false tubercle. It is no longer a special characteristic product, as Virchow thought; even its tubercular nature is put in doubt. Bajinski could in vain protest and affirm that the tubercle granulation is characterized by nodules which are formed by a zone of embryonal cells, of giant-cells and of caseous softening at the center; it was soon shown that all this pathological series can be found elsewhere than in phthisis, and that it is simply the result of a lobular phlegmasia of the lungs.

* This kind of tubercle may conveniently be distinguished as gray tubercle. According to Robin, the gray tubercle is due to hypergenesis of the normal anatomical elements. It was supposed to remain indefinitely without any change.—Tr.

(d) The granulation is not tuberculous unless it be bacillary. Bender goes even further (Séance of the Medical Society of Berlin, March 9, 1884).* He assigns to miliary granulation and to ordinary tubercle a mechanical origin. A foreign body (bacilli) comes, in the form of an embolus, to the roots of the lungs, to the parenchyma of the kidneys, etc., determining there infarctions, and phlegmons, which are in nothing distinguishable from the tubercle of phthisis. His microscopic preparations show the entrance of the bacilli into the veins. The only way, according to him, to determine the nature of the granulation is to find the bacilli.

(e) Bacillary Granulations of the Kidneys.—Under this head the observations of Bender on bacillary lesions of the kidneys are very instructive. They go to show that in the canaliculi the bacillus not only produces a desquamative nephritis, but also, within and around the malpighian bodies, a cellular induration, with inflammation of the interstitial tissue and dilatation of the glomerular artery, which is filled with bacilli. There is this characteristic feature: the miliary granulation is not of any specific importance to acute phthisis. The bacillary focus is the true granulation of phthisis.

11. Tubercle and Pseudo-Tubercle.—Tubercle, after having been considered by Laënnec as a morbid production *sui generis*, soon after took its place, in accordance with the more advanced patho-anatomical views of Andral Crouvellier and pathologists of a still later date, in the category of inflammatory products. It was in 1850 that the first public declaration in connection with the vexed subject, emanating from Germany, appeared, endorsed by Reinhardt, which clearly formulated the doctrine that the whole of phthisis is summed up in chronic lobular intra-alveolar pneumonia, constituting crude yellow tubercle, and a sort of interstitial pneumonia giving rise to gray infiltrations. Later on the attempt was made, by the aid of more rigorous microscopical methods, to trace the boundary lines between the accidental inflammatory nodosity, result of the action of a simple irritant, and the nodule called tuberculous. The endeavor proved fruitless. It was reserved for experimental pathology to clear away all difficulties and to restore tubercle to its true rank and place. The recent experiments of inoculation with tubercle, or rather

* *Ide Semaine Medicale*, March 9, 1884.

with the bacillus which is the cause of it, clearly separates the true from the false tubercles.

From an anatomical point of view there is no appreciable difference in the two cases; for in regard to both we have to do alike with neoplasms, characterized by cell production, and tending to fatty degeneration or fibrous transformation. But from the point of view of the irritant agent, the dissemblance is perfect, the divergence is absolute, for the tubercle of irritation only with difficulty reproduces a similar lesion, in fact can hardly be called inoculable; the bacillary tubercle is indefinitely inoculable, and perpetuates its infectious work.

The first localizes itself, the second tends to diffusion. The first is simply anatomical, the second is virulent, through the bacillus which occupies its giant cells and produces it.

Artificial Giant Cells.—Just as tubercles and giant cells may be artificially produced by the infection of foreign bodies in vessels which have been ligatured, Friedlander has seen them develop around foreign bodies which have penetrated the lungs, after section of the recurrent nerves.

Ziegler and Baumgarten have even remarked in these cases, the perfect similarity between these giant cells and those of tuberculosis. Walch and Emile Marchand after injecting into the cornea a solution of carmine, have seen these giant cells develop, in the centre of which was found the coloring matter. There is then nothing special in the artificial pseudo tubercles, nor in the pathological tubercles; the element the most important, the giant cells, is found just the same in both cases.

III. *Caseous Pneumonia. The Caseous State.*—As a general rule the tubercle rapidly undergoes caseous transformation. From the confluence of caseated tubercles there results foci more or less extended which constitute the masses of tuberculous infiltration, gray or yellow; from this fact Laennec thus concludes; the tuberculous products lead naturally to caseification, and reciprocally all that is susceptible of caseification is of tuberculous nature.

Virchow threw light as well as doubt on the exclusive origin of this caseous degeneration; he demonstrated that caseification is observed in all conditions of denutrition, whatever they may be, being found in centres of suppuration, in sarcoma, in the exudations of typhus.

Starting from this datum, Virchow clearly proved that a great number of morbid pro-

cesses which had been designated since the time of Laennec, under the name of tuberculosis, have nothing in common with tubercle, being nothing more nor less than the caseous metamorphosis of simple inflammatory products.

It is this question of degeneration that constitutes the diverging line between the theories of these two great men. Laennec, however, is destined to triumph along the whole line, for caseification is rare in every other lesion but tubercle, and if you search carefully the products of any so-called simple caseous inflammation, and especially the pneumonia called caseous, it is rare that you do not find the token of conviction, viz.: the tubercle. This doctrine is now, in accordance with the most recent researches, generally admitted, so in reality Virchow is right only when he agrees with Laennec; when he denies the tuberculous character of the infiltration, and of caseous pneumonia especially, he errs with the other partisans of the inflammatory theory. There are, according to Virchow, two ways of being phthisical: 1, by caseous pneumonia; 2, by tubercle granula. This doctrine of dualism is no longer tenable, since Thaon, Grancher, Lepine, Wilson Fox, and especially Charcot have furnished certain proofs that caseous pneumonia does not exist in the absence of tuberculous granulation or yellow tubercle.

We can go even farther and assert on the strongest evidence that all the elements of caseous pneumonia are inoculable exactly as are the granula and the tubercles themselves; this, too, for the simple reason that the bacillus dominates the whole.

IV. *Acute caseous pneumonia.*—It is in facts pertaining to the genesis of acute phthisis of pneumonic form, that the dualist doctrine seems to find the most support; indeed, the last refuge.

Tuberculous deposition has been known to commence by an attack of acute pneumonia, which appeared of simple fibrinous nature, but did not attain resolution; the tuberculosis then proceeded to unmask itself, and undergo a fatally rapid evolution. It will not do, however, to suppose from the order of sequence of these morbid processes, that there is here a transformation of the phlegmasia into tuberculosis. This is not the case: the pneumonia is itself but a first manifestation of the tuberculosis. Like tubercle, it has for its expression giant cells and an embryonal zone; in a word, a proliferation of cells on the alveolar walls, or in the connective tissue, and

cells of an epithelial kind in the very cavity of the alveolus. Therefore, caseous pneumonia has no existence, but there is a tuberculous pneumonia, a special inflammation with ulcerative tendencies, and characterized by the presence of tubercles in the lungs and numerous bacilli.

RÉSUMÉ.

The miliary granulation and the isolated tubercle nodule, gray or yellow, are of the same nature, and it is the same with the gray and vitreous infiltration; this results from agglomerated tubercles without the participation of inflammation. All these products terminate almost fatally in caseous degeneration, which preserves the characteristics of its tuberculous origin.

I. Since the unity of phthisis comprehends all its manifestations, acute and chronic, there can be no dualism inclusive of tubercle on the one hand, and caseous pneumonia on the other, nor is there any distinction between tuberculous phthisis and inflammatory phthisis, since caseous pneumonia itself has the bacillus as a constant voucher, as its certain origin, of which experimental pathology furnishes the proof.

II. The similarity or identity of the tuberculous nodule with the inflammatory nodule only exists in respect to the anatomical appearances and histological texture. Between true tubercle, which is parasitic, and false tubercle, which is the product of a simple irritation, there is nothing in common if we except the appearance, *i. e.*, the anatomical form. There is but one true tubercle: the bacillary tubercle; experimentation proves this, as we shall shortly see.

Pseudo-Hypertrophic Muscular Paralysis.*

BY A. S. THOMPSON, M. D.

HAVING early in my medical studies had my attention drawn to two boys in my own town who were peculiarly affected in their powers of locomotion, I interested myself in their cases until a "clinique" in Toronto General Hospital led me to diagnose the above malady; therefore I shall to-night take as my text the aforesaid cases, together with two seen in Toronto and other two seen in Prof. Grainger Stewart's clinique in the Edinburgh Royal Infirmary.

History: This disease, as you are aware, presents one or two marked peculiarities. (1) It almost exclusively attacks the male

members of the family; (2) without exception it is transmitted through the mother (frequently presenting a good example of atavism), for, though the parents themselves never show any symptoms of the disease, it can generally be traced back to some branch of the mother's family, such as brothers, uncles' and aunts' children, etc.; (3) children under ten are almost invariably its victims. As to its characteristics, it is marked by a great development in the size of the calf, making the child look a little giant, while in reality he is weak as an infant.

Pathology: As yet we cannot speak with certainty as to its true pathology, but it seems to me, from what has been gathered by *post-mortem* examinations so far, that there is no justifiable reason whatever for classing it with spinal troubles, and from the teaching I have received I do not think that "paralysis" is the proper term for the disease under consideration, and would prefer using instead the term "atony or atrophy:" (1) because a lesion in the spinal cord has yet to be proven (for, although some observers have found spots of sclerosis and disintegration of the gray matter of the anterior horn, in many of these cases there were other spinal troubles, and, in some, serious brain mischief); (2) at no time in the history of the cases I have seen was there any loss of power in the various sphincters; (3) because none of the above cases have shown any sensational trouble; (4) because the weakness of the muscles can be accounted for by the encroachment and pressure of the new growths on the fibers of the affected muscles. Following these changes from the beginning, the first noticeable feature is an apparent enlargement of the muscles, proving on examination to be an overgrowth of the interstitial connective tissue, which, from constant pressure on the muscles, necessarily causes their atrophy, and consequent weakness in the movements of the sufferer. This overgrowth of the connective tissue is generally accompanied by an increase of the fat cells, which also adds to the enlargement; these alterations continue for some time, when the fat cells disappear, the connective tissue grows less, and, as a final stage, Charcot mentions "weary degeneration of the muscular elements," this last being accompanied with complete loss of motion in the lower extremities, as is the case with one of the little boys mentioned in the introduction. Although the above are the changes found in most of the muscles, some few—generally those of the upper extremi-

*Read before the Detroit Academy of Medicine.

ties—seem to atrophy from the first (probably from want of exercise). This is predominantly the case in the muscles of the forearm and thigh, while those of the arm and shoulder, leg and hip take the ordinary course. There is, however, no regularity in the muscles attacked.

Cause: As stated in the History, hereditary influence on the mother's side plays a very important part, and a neuropathic tendency is more strongly marked than in any other disease, as shown by the fact that two or more members of the same family have been affected. Age has also a decided influence, considering that five out of the six cases were diagnosed before the eighth year. As to an exciting cause, there is none known; the condition in life does not alter circumstances, though injuries, certain sicknesses, bad ventilation and food have been supposed by some to exert an influence.

We will now pass to the more interesting heading, viz: symptoms, which, like Duchenne, I will divide into three stages. First stage, generally no suspicion is aroused until a weakness in locomotion is noticed by some member of the family, who, in watching, observes the readiness with which the child stumbles over the smallest obstacle; this, together with an inability for much exercise, makes the observer suspicious, and on examination an enlargement of the muscles of the calf is discovered, which, although slight, is sufficient (were its nature known) to account for the weakness. This apparent enlargement and weakness increases gradually until the second stage is reached, when the least exertion fatigues. In standing, the feet are widely separated, unsteady, and soon a peculiarity of gait appears, which is most graphically described by Fothergill, "Here there is a waddle or duck-like walk not unlike that of *Talipes varus*," or by Oliver Wendell Holmes, "Is that the long word you call it when a fellah walks so, said the young man, making his fists revolve round an imaginary axis." When erect, his shoulders are thrown back and abdomen forward; the latter being due to the lardosis, which is accounted for by the hypertrophy and weakness of the *erectores spinæ*; which, together with the enlargement of the *gastrocnemii* and *solei*, are well marked in this stage. The lardosis is specially observed in the lumbar region and is often so great that when lying on a plane, the shoulders and hips alone touch the surface, leaving a concavity, often large enough to admit a small pillow. If while in this

position the leg be flexed on the thigh, and thigh on the abdomen this curve almost entirely disappears; but when in the upright position, if a plumb be dropped from the shoulder it touches no part of the body before reaching the floor; in sitting, however, the lardosis is scarcely noticeable. As these changes progress, pedal navigation becomes more and more difficult and awkward, and the gait characteristic, especially in going up stairs. If a step is about to be ascended with the right foot the body is thrown to the left side, the left hand is placed just above the left knee, and while making pressure with it to overcome the weakness in the back, the right leg is swung up in a semicircular manner, and so on until, in a breathless condition, the landing is reached. Again, should he fall in walking, he rises, by first assuming the position of a child when creeping, then, getting on his hands and toes, places one hand above the corresponding knee and with a desperate effort literally "climbs up his own body," which feat he is unable to accomplish in the later stages, when he assumes the erect posture by climbing some near object; first seizing it, he then makes the advance upward last with hands and feet alternately; while in the stage the perpendicular position is unattainable by any means in his power. It is rarely that the muscles of the upper half of the body are hypertrophied, with the exception of the deltoid and triceps, thus contrasting markedly with the great hypertrophy of the lower limbs and protuberant abdomen. In the last stage walking is impossible, even sitting is irksome, and soon complete helplessness follows from the softening and atrophy of the various groups of muscles.

As to the other symptoms, formication is often one of the earliest, and, in two cases observed, there was a slight alteration in the deep tendon reflex, due to atrophy of the *quadriceps extensor* of the thigh; and as a class I have noticed that the extensors had less power than the flexors. There is no trace of rigidity or tenderness in the spine. Later on the foot is often so much drawn back by the *tendo achillis*, from the contraction of the connective tissue, as to require division. A peculiar mottling of the skin often accompanies the insidious development of this complaint. In none of the six cases under my observation was there any impairment of intellect; speech, however, was slightly thickened in one, on account of the hypertrophy of the muscles of the tongue. In all, the general health was good, and except over the diseased

muscles there was no rise of temperature. Dilatation of the heart was observed in two cases; in all the various sphincter muscles were intact.

Prognosis.—Unfavorable as to cure; some intercurrent malady however (frequently lung disease) generally removes the patient from his helpless and weary condition.

Treatment.—The treatment, though not encouraging, may be divided into constitutional and local. The former, including such remedies as phosphorus, strychnine, iron and cod liver oil, is used with a view of strengthening the constitution. The latter, or local treatment, which, in early months, promises a certain amount of relief, includes such therapeutical remedies as local faradization, shampooing, kneading, galvanism and the application of various apparati for relieving the condition of the patient.

Report of a Complicated Case of Confinement —Rupture of the Uterus.*

BY JUDSON BRADLEY, M. D.

I WAS called late in the afternoon of Aug. 6th, 1884, in council with Drs. Long and Maxfield, of the Marine Hospital, to see Mrs. — (of Scottish nationality, pluripara). Found patient in bed, apparently not suffering, except from anxiety, and quite cheerful. She had been in labor three or four hours previously to three o'clock p. m., at which time there had been a gush of fluid, the umbilical cord had escaped the vulva, and the labor pains had ceased.

The previous history of this case is about as follows: Patient is the mother of one child, now about seven years old. When this child was about two years of age the patient first noticed a tumor—partially filling the vagina—which continued to enlarge until about May, 1881. It had completely occluded the vagina, and so pressed upon the urethra that she found herself unable, one morning, to urinate. I was called to catheterize her. I introduced a flexible catheter and drew off a pretty large quantity of urine. She—the patient—was under the care of another physician who seems to have treated her expectantly. Subsequently to my single visit, the tumor, or cyst, or whatever it was that was filling the vagina, ruptured or ulcerated, and discharged a very foetid muco-purulent matter. After the rupture, or ulceration,

the volume of the tumor in the vagina decreased, but the patient seemed likely to die from blood poisoning. She had a long siege of septicæmia, but finally rallied, and was able to get about again. In fact she gained flesh, and to a casual observer seemed to be fairly recovered. But the discharge continued almost unabated.

In extenuation of her pregnancy under such conditions the husband stated to me that it had been urged upon them that if the wife could become pregnant and give birth to a child at term she would recover her health. In good time their wishes were realized, in-so-far that the woman found herself pregnant. In view of the fact that the odor from the vaginal discharge was most vile and penetrating, I cannot understand how sexual intercourse could have been thought of, much less indulged in. Her physician also thought her pregnant.

Two weeks before the time we were called to see this patient she had had a rupture of membranes, as she thought, and had made some attempt at labor. On this occasion she had another burst of fluid, and the labor pains—which before had been hard—suddenly ceased as before stated, and the umbilical cord had been prolapsed. Dr. Maxfield reached the home of the patient first, and found pulsation still in the cord. When Dr. Long reached the bedside of the patient, the pulsation of the cord had ceased—indeed, it could not have continued long, as the sequel will show.

Before my arrival, Dr. Long had made an unsatisfactory examination, and had detected a fæcal odor on his fingers afterward. It was next to impossible to make a complete examination while the patient was sensible of the effort. Accordingly it was decided to give chloroform and make the examination complete. Chloroform having been administered, I made a digital and bimanual examination and found a foetus with the head presenting above the tumor in the vagina. The foetus was still above the brim of the pelvis.

Drs. Long and Maxfield both verified the position of the foetus.

As the foetus was small it was determined to try and deliver it with the forceps, we being in hopes that pulling down the head would so press away the tumor as to admit of delivery.

Anæsthesia being continued, Dr. Long produced a pair of forceps which he requested me to apply. After a hard and somewhat

*Read before the Detroit Academy of Medicine. Reported with the consent of the other physicians interested in the case.

long trial I succeeded in adjusting the forceps to the head of the foetus and found them to hold well. But hard traction failed for a long time to bring down the head. It would wedge against the tumor—which seemed to be developed in the recto-vaginal septum—and would hang there in spite of all the force exerted. However, after long pulling, in which I was assisted in turn by the other gentlemen, the head engaged in the superior strait—riding over the tumor. Then the forceps slipped. They were readjusted and again slipped; again adjusted and the third time slipped. Failing thus in the delivery I now suggested turning, although it seemed quite improbable that the foetus could be delivered by turning. I made the attempt, however, and succeeded in getting my hand past the head and made search for the feet. At first I failed to find them owing to the complicated condition of the maternal parts, but finally I found them and brought them together out of the vulva and the shoulders followed readily enough but the head proved obstinate until I got my left hand into the vagina and rotated the head into the transverse diameter of the pelvis. I was then able to deliver the head by forcing down the chin with my finger in the mouth of the foetus.

While the patient was still under the anæsthetic, I made search for the placenta. Not finding it in the fundus of the uterus (that part of the organ being smooth and lined with continuous mucous membrane) I passed my fingers along the cord and followed its course until it led me into the abdominal cavity through a transverse rent in the uterus just above the vaginal junction. I removed the placenta and found attached and surrounding it coagula that had formed some hours previously. Dr. Long confirmed the diagnosis of rent in the uterus.

It was now plain to me that when I was searching for the feet of the foetus I had found them sticking through the rent in the uterus into the abdominal cavity and I had also felt the edge of the omentum, or a fold of it.

It is not clear to me how the placenta got into the abdominal cavity, but I think that it was attached to the posterior segment of the uterus just above the seat of the rent and that the labor pain that caused the rent forced the placenta through it into the abdomen. These facts would seem to point to such a conclusion, viz.: the cessation of labor at the time that the cord prolapsed and the failure of the pulsation in the cord soon after its pro-

lapse. Commonly such a complete rupture of the uterus would bring on a collapse in the patient. This did not occur in our patient. She was on the contrary quite normal in appearance and had a good pulse nor was she cachectic or thin. Her weight at that time could not have been much less than one hundred and fifty-five pounds.

The child born was a boy of about six months' development. The presentation was in the left occipito-anterior position. Duration of labor three hours of pains, and delivery accomplished four hours after cessation of pains. In all seven hours of labor.

The patient was left in the care of Dr. Maxfield who remained at or near the bedside all night. She reacted well from the chloroform and did not seem to suffer much from shock. To have morphine p. r. n. and milk punch as she required.

7th. In the morning quite comfortable. Passed catheter and drew a fair quantity of urine discolored by blood. Subsequently she urinated voluntarily and the urine became clear. Towards noon peritonitis became pronounced. At night morphine hypodermically was required to dull the severe pain. Temperature 101.5° Fah. Pulse 130 per min.

8th. Vomited about every two hours. Temperature 100.5° Fah. Pulse 132.

9th. Patient is sinking. Temperature 100° Fah. Pulse small and about 145 per min. At 5 p. m. the agonies of dissolution were great. Ordered morphine hypodermically to induce euthanasia. Patient died at 11 o'clock p. m. No autopsy. Thus passed away a great sufferer whose patience was really wonderful.

It is to be regretted that a portion of the tumor was not obtained for microscopical examination, as that would have thrown great light upon this most unusual complication of pregnancy and parturition. But the husband and friends declined to have the corpse interfered with. Consequently we can only surmise as to the precise character of the tumor that indirectly caused the woman's death.

Diseases of the Nails.

BY C. C. YEMANS, M. D.*

Nails are appendages of skin, of hard, horny, elastic, semi-transparent substance, which are imbedded in the skin upon the last phalanges of the fingers and toes. They are really modified epithelium, analogous to hair

*Read before the Detroit Academy of Medicine.

and the outer layer to epidermis. The nails are subject to various pathological and destructive conditions. They are held in a matrix, overlaid at the root by the integument and along each side; a free border at the outer end. The matrix has no epithelial layer, but the nail rests upon the rete mucosum, and the papillary layer of the corium. The nails grow in progression from the matrix forward, sliding over the rete and papillary layer. The nails of the fingers and of the toes are subject to the same pathological conditions.

Onychia is an inflammation of that part of the matrix which contains the root of the nail. It is very painful, very obstinate and very offensive.

Paronychia is an inflammation of the matrix at the borders of the nail.

Onychogryphosis is a deformity of the nails, in which they take the shape or form of the claws of birds. This deformity fortunately is rare.

Onychomichosis is a disease of the nail caused by the presence of a vegetable parasite, trichophotinia. Of this I have seen but one case, in which the nails of both fingers and toes were involved. This parasite grows within the fibres of the nail, makes them dense and opaque, loosens them from the matrix, and is not only a serious deformity, but a painful trouble. These cases are treated only by anti-parasitic remedies and with great care.

Onychia arises often from syphilis, from psoriasis, from eczema, from variola, and from scarlatina, and belongs to that class of diseases of the nails which require both general and particular treatment.

The substance of the nail is also subject to atrophy and hypertrophy. Indeed hypertrophy is frequently but the initial symptom of atrophy.

But I am to write this paper on ingrowing toe nails, paronychia, of which ingrowing toe nails (so called) is a typical case.

As to the causes of paronychia, direct injury, either by blows or chemical agents, any mode of injury which creates an acute inflammation of the pulp of the toe, thus causing the substance at the lateral matrix of the toe to press forward against the nail, and by accidentally cutting itself increases the difficulty. This is one of those troubles which has no self-limitation. The most frequent cause assigned is that of ill-fitting shoes, ill-formed, causing an awkward gait by pressure upon the toe which initiates paronychia and all the results which follow.

I am not prepared to take up the discussion of shoes but in general terms only to say that a low heel and a broad sole are conducive to the comfort of the wearer, and prevent to a certain degree the occurrence of this trouble. The U. S. regulation shoe is the best model.

I have not time to discuss fully those questions. Happily the manicure now receives attention.

But, after all, the most important part of this subject is the treatment of the obvious difficulty. Very little has been written upon the subject, and mostly all in the same line. The literature is exceedingly meager. I do not know of a fairly elaborate treatise upon either nails or ingrowing toe nails, and nearly all the operations devised are but simply modifications of but one operation: the paring of the nail and lifting up of the edge of the same. This mode of treatment has never been satisfactory, and I will give you what is said of it from one of our latest authorities, to show you how little attention is paid to matters of very grave importance.

TREATMENT.

This will vary with the cause, which must in each case be sought for. Both local and constitutional remedies are employed, either alone or conjointly, according to the nature of the affection. Hypertrophy of the nail may be removed by the knife or scissors, after the growth has been softened by hot water baths or poultices. It is generally advisable at the first operation to remove a portion only of the hypertrophy on account of the liability of the nail to split. But here I raise the question, is the nail hypertrophied or is the pulp of the foot hypertrophied, and consequently pressing forward? Which is the cause and which is the effect? In my judgment, the toe is crowding up to the edge of the nail, and it would be more natural to remove the hypertrophied part of the toe and leave the nail intact. The operation which you are likely to perform will depend upon your theory as to which is the seat of atrophy, the pulp of the toe or the nail over the swollen part.

This is from Duhring:

"Ingrowing toe nails should receive attention in the avoidance of all pressure, frequent cutting and protection of the soft parts placed between the nail and the skin fold. Alterations in the nail through constitutional disease, as for example syphilis, must receive general treatment, suitable to the case.

Nails invaded by fungi are to be treated by parasitocides, together with internal remedies, if the latter seem to be indicated."

This exhausts his treatment of this important matter.

The treatment of ingrowing toe nails varies with the extent of the disease. In mild cases short threads of charpie are inserted between the offending border of the nail and the tender granulating surface upon which it presses. Counter pressure by plaster, and the local use of the crayon of nitrate of silver may be at times employed with advantage. In severe cases the nail may be removed, though this is generally unwise.

I present you this patient as illustrating a method which seems to me to be far better for the patient and agreeable to the practitioner. This young gentleman's toe was so swollen that he could not wear his shoe, and then walked lame. He was a cripple with an ingrowing toe nail. Thinking of the failure which would possibly attend the removing of the nail, I concluded to cut away the pulp of the toe to prevent its upward pressure against the free cutting surface of the toe nail. You will see the toe nail is not larger than the other, but this young gentleman has not been lame since, and in three days from the operation was walking without pain, a result which could not be anticipated by any of the older methods.

To conclude, I regard the term "ingrowing toe nail" as quite misleading, and calling one's attention away from the true pathological condition, and as one's practice must depend for its accuracy very largely upon his knowledge of correct pathology, I think the distinction is worthy of note. Acting upon this theory that it is the toe which is hypertrophied in most cases, I simply excise from the side affected with a straight knife all that part of the toe protruding above or upward from the nail, leaving the whole surface to be covered by granulation, trusting to the contraction which occurs in healing by this method to draw the pulp inward and under the edge of the toe, so that the nail becomes a protecting roof and not an irritating cause hereafter, whether it be hypertrophied or not; and so the patient is saved from pain and lameness and able to wear his ordinary shoe without reminding him of the original condition of his toe.

A writer in the *Medical Times and Gazette* says that fourteen per cent. of school children have headache.

Our Present Medical Knowledge.

BY DR. C. E. NELSON, NEW YORK.

SIR: Although more than fully occupied preparing purely medical and scientific articles for the press, I voluntarily cut out a part of the time, to write this communication, thinking it may interest a certain number at the present time.

For twenty years I attended solely to my private practice, but did not trouble myself as to what was going on around me; in other words, I did not attend medical societies, did not write for the press, or mix up in any way with my colleagues, except of course occasional consultations, surgical operations, etc.

Lately I have joined societies, been a contributor to the press, and have mixed more with my colleagues; there are consequently many things, conditions, factors, that strike me as strange; therefore, possibly, a letter from me would be more interesting, in certain points of view, than a letter on the same subject from a person who has led the life of a routinist.

Please allow one more preliminary remark. I do not wish to be considered as finding fault, as criticising any conditions or any persons (because we all live in glass houses); but simply to act the part of a historian, viz., to write a series of statements, eliminating bias, as I earnestly hope; otherwise, as Tacitus tells us, history is of no value.

Knowing the value of your space, I will be brief.

New York twenty years since was not what it is now; all the conditions and factors have completely changed. At that time, knowledge, industry and perseverance were crowned finally with reputation and a financial competence.

Now, New York is a cosmopolitan center, differing in this respect from the other cities of the Union. London and Paris are the only two other cosmopolitan centers.

Berlin and Vienna attract a certain number of foreign medical students, but they are still merely local centers. Chinese cities, though populous, are swayed by a patriarchal government; the conditions are radically different, and foreign conditions and factors have rarely made an impression on the surface.

Now, London and Paris are very different from New York; their populations consist of a much slower-going people, though individually many celebrated names are placed on the historic page. The vast size of these

European cities is such that a stranger, although well informed and scientific, will find himself utterly lost, as regards standing. There is a *settled* condition of affairs in the societies, that does not obtain in our metropolis, although they have numbers of specialists.

Per contra, our metropolis is the goal and landing point of the oppressed, the hungry and the adventurous, of nearly every nation. The consequence is that we have now to compete with smart but impecunious young men from Berlin, Vienna, etc., who graft themselves on our social polity. Quite recently the Vienna profession complained loudly of an influx of practitioners from Berlin; but New York makes no complaint.

New York being an emigration landing point would make no difference, were it not that the city proper is limited in extent, and that in consequence professional names are bruited about very easily by means of medical societies, the press, drummers and other media—a condition which could not obtain in such large marts as London and Paris.

The loose statement is made that there are too many practitioners. When I was a boy New York had a high proportion of physicians to the population, as now; but everyone had his share of practice. How is that? At that time there were only two hospitals, Bellevue and the picturesque old New York, which is now torn down; now there are forty hospitals; the houses of mercy and refuge are innumerable. So whether New York had 500 or 3,000 doctors, the 500 would have no more private practice than the 3,000. This statement of too many practitioners is got up by hospital attaches; naturally, whatever private practice may be left gravitates to them, either legitimately or illegitimately.

Regarding specialism, or piece-work, its influence cannot be lasting; for the simple reason that if every practitioner chooses a specialty, it is merely a question of who is the best specialist, then matters are reduced to the *ante quo* condition of former times. This is very easily seen even now; specialists who started a boom two or three years ago, are now brushed aside by brother specialists, and, singular to relate, by the ignorant public even. Specialists, in their press articles, carefully ignore what their brother specialists have done, but have no objection whatever to quote foreign names of persons three thousand miles away, who cannot compete with them. In society meetings the more noted specialists carefully keep away the night that some

celebrity is going to read a paper; perhaps the 'papers' are not reported, and it is not to be supposed the stay-away members will disseminate the intelligence; the members who are present will, in the politest manner, take the salt out of the paper read, if they take the trouble to say anything at all.

An interesting factor is our female element, which crowds our societies. The women evidently come from the working classes; perhaps sewing or shop girls; they either prefer more lucrative work, or perhaps could obtain no employment at all. After obtaining the diploma, by employing judicious drummers, they are now abundantly able to make both ends meet.

I was extremely amused the other night at a society meeting. The first paper was by a lady, who entered accompanied by a female contingent; although the room was stifling hot they kept their furs on. The paper described her modification of a European instrument; she passed around the other patterns in use, which, of course, were all inferior. The paper finished, the president suggested that the addition of a spring would complete an instrument which was now only in its beginning. This was more than human nature could stand; as for the members, most of them were dumb as oysters; the few who got up did so tremblingly, and were as brief as possible. Before her "answer" came, at the close, some of the members kept slipping out of the room, showing that discretion was the better part of valor. It was well that they did so, because when her "answer" came, it was a fulmination, interspersed with the most contemptuous laughter. When the second paper was read, by a man, the lady had nothing to say, showing that she was a true specialist, perhaps.

Is our present medical knowledge increased?

At a society meeting a listener who does not know the ropes (or as the French say *au fait*) is struck with the erudition displayed, both in the "paper" and in the discussion. The truth is, that specialists in that certain branch have been called upon personally, or earnestly invited to be present that evening; excerpts from the "paper" have been printed, and the slips sent, a certain time in advance, to those same specialists, who get together their German, French and English pamphlets and journals bearing on the subject, coach up and cram for the evening. The president calls them up by name, like schoolboys learning their lesson. The excuse for this proceeding is that it secures a "better evening." Perhaps it does.

Proceedings of Societies.

Detroit Academy of Medicine.

DEC. 9th, 1884.

The Academy met at the residence of the secretary, Dr. Long occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Manton read a paper on "The Use and Abuse of the Pessary." (See LANCET, Jan., 1885, p. 293.)

DISCUSSION.

Dr. Bradley: I have not had occasion often to use the pessary in my practice. I have listened with interest to the paper, however, which is full of valuable practical suggestions.

Dr. Cleland: I do not think that I have much to say. For those of us who are only occasionally called upon to fit a pessary, a paper like that just read is extremely useful, furnishing, as it does, a brief resumé of the most important points to be borne in mind. The doctor has not stated the principle underlying the use of the pessary. I think its most important function is to restore to its normal condition the circulation in the uterus. A pessary that will accomplish this will serve its purpose. Venous stasis will be relieved by it; exudates will be taken up, and engorgement will disappear.

I think the cotton pledgets of which the doctor speaks will not always be found sufficient.

Dr. Gilbert: I have been interested in the paper, and instructed as well. I have had personally almost no experience in the use of the pessary. I should like to know what are the circumstances which render their use necessary. If I understand it, the difficulty generally arises from want of muscular tonicity. Will this difficulty be corrected by the use merely of mechanical devices? Would it not be better to remove the cause, build up the patient's general health, etc.

Dr. Emerson: The special department of medical practice in which I have been most employed has brought me in contact with a large number of patients who require treatment for uterine troubles. While under treatment for nervous diseases, they are naturally unwilling to call in the aid of a second specialist, and so it is often necessary to do for them the best that we can. The doctor has well stated the difficulties of adjusting a pessary. I well remember some of my own earlier attempts in that line, with only an im-

perfect knowledge of the object to be accomplished, and without the necessary assortment of instruments from which to select.

Many patients apply for treatment in our asylums who have uterine difficulties; some have worn pessaries, many have been long under local treatment. We found it frequently wisest to place such patients in bed, remove any pessary they may have worn, and refrain from all local treatment, endeavoring to withdraw their minds from that portion of their anatomy.

Dr. Andrews: I wish to express, as others have done, the satisfaction with which I have listened to the paper just read. I wish I had heard it or read it before graduating. Like other young graduates I had very little idea how the instrument was to be used or what it would accomplish. I had to learn by experience.

The physician generally has a vague idea that a pessary is a something to support something, and he applies it in a vague and purposeless way, accordingly.

What the doctor says about the treatment of cases where there are adhesions seems to me wise. Some of these cases are very troublesome. One which was for some time under my care will illustrate. The patient was near the close of menstrual life. The uterus had been completely retroverted. She had been wearing a Smith-Thomas pessary, which had been fitted for her by a specialist. It had been removed and replaced by another specialist, who had inserted it wrong side before. I found that there was so much inflammation that it was necessary to remove the instrument, and institute treatment for the inflammatory condition. I tried instrument after instrument before I found one which she could wear with any degree of relief—for she was a great and constant sufferer. Her circumstances were such that she was compelled to work. An opportunity, however, offering, I sent her to the sea shore, where she remained three months and came home quite free from suffering. She was then wearing a Smith-Thomas pessary with bulbous end, such as the doctor has described. After four weeks of work, however, she was as badly off as ever; her pessary affording some relief, indeed, but hardly so as to make life tolerable. I could do nothing at last but to instruct her as well as I was able in regard to the use of the instrument and let her go.

* The office of the pessary in one class of cases is to make up for losses in the floor of the pelvis or in the sustaining ligaments. In

another class of cases it is rendered necessary by the increased weight of the organ from congestion or from inflammatory enlargement, or by a constrained position resulting from adhesions.

Pessaries are often put in by physicians with the vaguest notion of what they are to accomplish. Not unfrequently I have found them where they have been worn for years, very likely doing no good, and often producing injury, giving rise to inflammation, etc.

Dr. Manton: I did not attempt in the present paper to explain the *modus operandi* of the pessary. That, in fact would require an entire paper. In regard to the use of the pessary when inflammation is present, I may say that while a *para metritis* contra-indicates the use of the instrument, congestion or inflammation of the uterus itself may be benefited, the mechanical support relieving engorgement.

As stated in my paper, I do not believe that every case of uterine displacement can be successfully treated by the pessary.

Dr. Connor: While I have nothing to say about the especial subject of the paper, I wish to make this general comment. The graduate from a medical college, in these days, should have no excuse if he be found ignorant of the appliances which modern science furnishes for the examination of the different organs of the body. The man is not qualified to undertake the responsibility of a physician's work who has not had practical training in the diagnosis and treatment of disease. In the old times when the preceptor did more for the student than the colleges, the study of medicine meant just such a practical training. With the larger knowledge which we have today of the nature of disease, and the improved means of physical examination, the student must needs give more time than his predecessor did to the mastering of his art, and yet we find the schools competing one with another, not in the excellence of the education they shall give their graduates, but in the number of half educated or uneducated licentiates they can place in the field.

Dr. Gross told me that he had lectured to 45 classes of medical students, and he never finished a course of lectures without saying to himself "Another d——d farce ended." "It was fun to talk to the boys; I enjoyed it; but at the end of the course they did not know anything about surgery. What they needed was training, and that they never could get in the lecture room."

When I asked him why this was so, he sig-

nificantly slapped his pocket. That little action of the master of American surgeons made it evident at once that a reform in medical education was needed, and that such a reform was to be looked for only in the distant future.

PATHOLOGICAL SPECIMENS.

Dr. Chittick exhibited the liver of a patient having the following history. For some years she had suffered from severe *gastralgia*, and had been under treatment by different physicians here and in Canada. A few weeks ago she returned to Detroit and came under my treatment. She was much jaundiced; vomited often, stools liquid, tinged with bile, sometimes contained mucus, and even blood. There was near the umbilicus a hard mass which seemed to shade off into normal tissue, but the abdominal walls were so thick that it was impossible to make out anything very definite. Concluded that the disease was malignant. Bile ducts were not obstructed, because the feces were tinged with bile, and there was bilious vomiting, but the icteric condition of the skin and the presence of the biliary constituents in the urine showed involvement of the liver. The post mortem examination showed that the liver was the seat of extensive morbid deposits, undoubtedly of a malignant character, although no microscopic examination has yet been made. The gall bladder contained also a number of calculi.

Adjourned.

Dec. 16, 1884.

The Academy met at the office of Dr. Cleland, Dr. Long presiding.

Dr. Lyons exhibited a simple device for disinfecting rooms. The idea was taken from the recently described disinfecting lamp of Dr. Richardson. This is an ordinary lamp, filled with a mixture of bisulphide of carbon and benzoline—whatever that may be. The bisulphide of carbon in burning produces sulphurous acid in abundance, and is a more convenient source of this disinfectant gas than the brimstone which is generally employed, and which is so troublesome to ignite.

Alcohol may be substituted for the benzoline, and the mixture burned in an ordinary alcohol lamp. A uniform continuous supply of sulphurous gas is thus easily obtained, and by pouring a little of the mixture on a plate and setting it on fire, a large volume of the gas may be generated almost instantaneously.

Care must of course be taken in handling substances so inflammable as these, but when such care is exercised they are not dangerous. It is possible, by substituting for the carbon bisulphide, compounds of chlorine, bromine or iodine, to make the lamp diffuse vapors of these powerful disinfectants. Thus, a lamp charged with a mixture of alcohol with bromide of ethyl, will soon fill a large room with vapors of bromine. Recent experiments have indicated that bromine ranks higher even than chlorine as a bactericide, and it is said that iodine is superior to either. Bromine is now employed to a considerable extent in hospitals in Europe, but it has always been difficult to regulate the supply of vapor. Even when the bromine bricks, as they are called, are employed, one is apt to overdo the matter, rendering the air in the room quite irrespirable. Of course, thorough disinfection implies this—whatever disinfectant is employed, but it is often desirable to maintain a moderate action for a length of time, and this the bromine lamp enables us easily to do. The moment the extinguisher is placed on the lamp, the evolution of bromine vapor ceases.

To obtain vapor of iodine, the lamp may be filled simply with tincture of iodine, or we may use a mixture of alcohol with iodide of ethyl or some similar compound. A mixture of chloroform with alcohol will evolve chlorine. All these are efficient disinfectants, and may often be employed with advantage.

Dr. Cleland: The idea of this disinfectant lamp seems a practical one. In cases of contagious diseases it would be possible to disinfect a house, or any rooms in a house by this means.

Dr. Gillett: I have sometimes advised burning a little sulphur as a means of partially disinfecting a house in which there is a case of infectious disease. It is impossible to use much of it while the house is occupied. Tincture of iodine might be dropped into a cup of boiling water and so diffused through the atmosphere. In cases of chronic bronchitis I have sometimes employed iodine in this way as an inhalation.

Dr. Bradley: I am in favor of the use of disinfectants where they are necessary. A little may do no good whatever, or be worse than useless, by giving rise to a false sense of security. Pure air is the best disinfectant.

In employing inhalations of iodine we must remember that with some female patients who are "irregular" they produce excessive men-

strual discharges. This seems to be from the effect of iodine on the blood. I have seen great harm done from ignorance of this action of the remedy. In many cases of chronic throat trouble, inhalations of iodine prove very useful, clearing up hoarseness, and sometimes relieving cough.

Dr. Long: In the thorough disinfection of apartments in which there has been a case of infectious disease, I have followed up sulphurous acid with bromine. The vapor of bromine is very heavy, and will therefore penetrate carpets, etc., when these remain on the floor.

Dr. Chittick exhibited some drawings illustrating a case of extroversion of the bladder on which Dr. Wyman operated a few days ago. The patient was a child a week old. Although several ounces of blood were lost in the operation, the child did not seem to have suffered seriously in consequence.

Dr. Cleland: I had, the other day, a beautiful case of suspended animation in a new born infant. The labor had been long and tedious, ending in a forceps delivery. The child at first breathed, and cried, but presently stopped breathing. I put it in hot water, alternating hot with cold, and endeavoring by all the usual means to excite respiratory efforts, but for more than 15 minutes got no response. At length, however, breathing was established, but after an unusually long interval.

Dr. Long: I remember one case in which after employing all the usual means to induce respiration in a new born child, I gave over effort, but the child, left to itself, after a while began to breathe.

Dr. Gillett: I had a case only a few weeks ago in which the child did not breathe for fully ten minutes after birth.

Dr. Bradley: I have seen a child remain fully an hour before breathing was perceptible. As long as the heart continues to beat there is a chance for life.

Dr. Long: A remarkable case, of a different character, occurred some time ago in St. Louis. A physician in good practice was called to attend a woman in labor. The case was a tedious one. As it progressed, something came down, which the doctor supposed to be a portion of the cord; not knowing what else to do, he cut it off, and it was afterwards found to be a portion of small intestine about eight feet long. The strangest thing in the case is the fact that the woman for some days seemed to be getting along nicely. On the eighth day after confinement she sat

up in the bed and combed her own hair. Of course she could not live, but for a week she did not seem to her attendants like a person who had sustained a fatal injury.

The husband has started a malpractice suit, but the physician continues still to practice medicine.

Adjourned.

DEC. 23, 1884.

The Academy met at the office of Dr. Andrews, Dr. Long presiding.

WRITTEN COMMUNICATIONS.

Dr. Manton read a paper on "The Indications for the Use of the Pessary." (See LANCET, Feb., 1885, p. 342.)

DISCUSSION.

Dr. Chaney: The use of the pessary is very imperfectly understood by the majority of general practitioners. The idea seems to be very generally held that the pessary is a sort of a panacea for all female ailments. In many cases which a few years ago were treated by the pessary, Emmett's operation for lacerated perineum is now performed.

Dr. Wyman: Dr. Chaney's remarks recall to my memory a case of abuse of the pessary. The patient came under my treatment for an obstinate sciatica. I learned that she was troubled also by a foetid discharge from the vagina. On examination I found in the vagina an old-fashioned glass bi-concave pessary, which had been placed there twenty years before, and forgotten. Her difficulty in locomotion was really due to pressure of this foreign body upon the sacral plexus.

In another case, where a cup-shaped pessary had been worn for years, I found almost complete amputation of the cervix—which had been an abnormally elongated one.

Dr. Yemans: I have nothing to say on this subject. I do not do any gynæcological work. I never placed but two pessaries in my life.

Dr. Bradley: The writer of the paper alludes to the influence of student life in causing uterine displacements. Twenty years ago I had occasion to learn something about the cramming process of which he speaks. The influence of close application to study, especially at the period of puberty, must be damaging to the general health of young ladies; it produces anæmia in the organs which ought to be acquiring their normal development.

One very injurious thing in connection

with our modern school-houses is the amount of running up and down stairs that is necessitated by the way these buildings are arranged. At Mt. Holyoke Female Seminary I know that many of the pupils were physically ruined for life by this cause alone. There was no reason why the building should be more than one or two stories high; land was plenty and cheap; but the pupils were obliged to climb four flights of stairs. We find in these institutions numberless illustrations of woman's inhumanity to woman. I have in mind a lady who was educated at Vassar. During her menstrual period she was put into a cold bath; result, a spine that to this day does not permit her to walk.

If I were called upon to treat a girl who had been attending school, or living the artificial life of many city girls, I should wish first to turn her out to grass, *i. e.*, to send her into the country to recuperate by living a healthy, out-of-doors life for a while.

Dr. Noyes: I have long been persuaded and convinced of injury done to young girls by what has been termed here to-night cramming—by close application to study. There are too many studies; the hours for study are too long. The evil is a growing one.

My experience in the use of the pessary is very limited. I was always opposed to them. I have known of many instances in which they have done injury. I do not now see clearly how it is possible to introduce anything into the vagina which can have much effect to support the uterus—at least without producing injurious pressure on parts whose office is not to serve as a support.

Dr. Yemans: I was slow to believe that going up and down stairs was especially injurious. Lately I have had occasion, however, to observe how even gentlemen carry themselves in going up and down flights of stairs, and I do not wonder that harm results from the concussions to which various parts of the body must be subjected. I hardly ever see even a gentleman come down stairs easily, and gentlemen have the advantage of a convenient dress, which permits them to maintain an upright position. A lady must assume a constrained position on account of her dress. Ladies, and gentlemen as well, could learn to go up and down stairs much more easily than they do; they do not give any attention to such matters, as these do not come within the scope of their training at home or at school.

Dr. Wyman: This subject is one of a great deal of importance. I have analyzed carefully

my own sensations in climbing stairs ; the rapid tumultuous action of the heart which is induced by the exertion cannot fail to affect the circulation in the viscera.

The complaint that the schoolhouses are built too high is not a new one. A man will not build a house or a stable two stories high for the accommodation of his animals, but when it is only children and young men and women that are to suffer, we find two, three, and four flights of stairs to be climbed half a dozen times a day. Physicians ought to be more earnest and persistent in their protests in this matter.

Dr. Lyons : There is no question that the climbing of long flights of stairs, especially where this is the only severe exercise taken, is injurious to girls and young ladies at school. The real difficulty, however, is to be sought rather in the system of training which ignores everything but the intellect in the education of our young people. If a girl had the physical vigor which she ought to have, it should not be any severe tax upon her powers to go up a few flights of stairs several times a day. The difficulty is that our schools, and our house training as well, take no account of the muscles. What we as physicians should do is not merely to protest against unhygienic conditions to which children in the school-room are submitted, and such real evils as that which has been so much dwelt upon to-night, but to urge strenuously the necessity of a systematic training and exercise of the body as well as the mind of the school-boy and the school-girl. As it is, most girls, by the time they have "finished their education," are incapable of enjoying a half hour's walk even, let alone a ramble in the woods. They are better fitted to go to a nunnery than to become mothers. Let us by all means have fewer stairs in our school houses, but let us give the pupils in the school such a training that they shall not find themselves panting for breath by the time they reach the first landing.

Dr. Manton : The laws of Lycurgus allowed women to marry at twenty until then they are kept at field sports. It is the exclusive attention to mental culture in the training of our girls that is disastrous. In reply to the objection raised by Dr. Noyes, I would say, that, in my previous paper, which the doctor did not hear, I explained the mode of measuring the vagina for a pessary ; if the pessary fits, it will not produce any undue pressure upon the walls of the vagina.

Dr. Connor: A few days ago a lady, herself

as perfect a specimen of womanhood, physically, as the city affords, said to me, "I have three daughters, who might be a great assistance to me, but they are good for nothing ; I have to do my own work and their's besides." I do not know how this lady spent her girlhood, but I am sure it was in different, and more healthful surroundings than those in which her daughters are growing up. At sixty she is as active as she was at thirty-five ; I venture to say, she has never had occasion to go to a gynæcologist.

Her daughters doubtless had as good an inheritance of physical vigor as she herself. Whose fault is it that they are good for nothing?

I have one patient, a young girl, who consulted me for some trouble of the ear and throat. I found that, at her tender age, she was in the habit of going to parties and amusements almost every night. I said to her parents, "If this girl will do as I direct, I will undertake to benefit her, but if not, I do not want to have anything to do with the case. If she comes under my treatment, she must promise to go to bed at eight o'clock every night; she is not to go out at all in the evening." I gained an unwilling consent to these terms, and now my patient is as healthy looking a girl as you will find. But this will not last; she will go back to her dissipations, and by the time she is twenty years old will probably be a chronic invalid.

Dr. Long: There is one point that has not been mentioned, in discussing the etiology of uterine displacements. This is the want of proper care of girls, both at home and at school at the time of their menstrual periods. Teachers as well as mothers ought to give attention to this matter.

Dr. Manton: There is no doubt that the roller skating that is just now all the rage, will be productive of much harm. Young girls will go out evening after evening and over-tax their powers, while the novelty of the thing lasts. The exercise is good in itself, but they are unused to it, and will not keep within the bounds of moderation.

In Germany I have seen at the clinics healthy strong women, with all manner of uterine flexions and prolapses, but they paid no attention to them. It is different with ladies of delicate nervous organization. It would be folly to place these women under treatment for their troubles; they do not know that they have any. So it would not be right to institute treatment in a virgin with hymen intact.

Dr. Long: Dr. Fordyce Barker used to say that the best pessary was a baby.

Dr. Kelly: I have had occasion to notice that there is a wonderful amount of knowledge necessary to use the knee joint properly.

Dr. Noyes: The stairs in our school houses, as in our dwellings, are built too steep. There is a great difference between these and the stairs that rise gradually, in the ease of ascending them.

Dr. Manton: One cause that leads frequently to uterine displacements which I omitted to mention, is abortion.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

W. H. LONG, M. D.,
President.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Illinois State Board of Health—February Meeting.

THIS report bears evidence of steady advance of this board in the development of its work. From it we take a few items of general professional interest.

It will be remembered that the board gave notice to the several medical colleges of the United States that it would not recognize their diplomas as entitling their holders to a license to practice medicine in Illinois, unless they made certain requirements of their students as to preliminary examination, to courses of study, and to graduation. These requirements were ridiculously low, and such as any honest, efficient medical college should have far exceeded without being asked to do so. But low as they were, and abundant as was the time allowed for the colleges to adjust their requirements to the minimum standard, we find in the report before us that out of 47 colleges whose diplomas of 1883-84 were presented as a basis for certificates, 21 failed to comply with them and their graduates have been compelled to submit to an examination by the board. In a number of such cases the applicants declined to appear, withdrew their applications and left the state.

It is pleasing to note that while non-graduates are admitted to examination by the board, the proportion of those rejected is constantly increasing. From this it appears that the board is steadily raising the standard

of its examinations. At the last regular examination 13 non-graduates presented themselves, but none knew sufficient to pass.

Certificates were refused in 117 cases. The refusal was based upon the four following causes: 1. Failure to present a diploma from a legally chartered medical institution in such standing as the board recognizes. 2. Failure to pass a satisfactory examination. 3. Bad personal or professional antecedents. 4. Proved intent to practice in an unprofessional and dishonorable manner, as by claiming to cure incurable maladies; to possess unusual skill, experience, or facilities; and similar claims involving deceit or fraud upon the public.

Five certificates have been revoked on proof of unprofessional or dishonorable conduct. Charges against some fifty more persons are still pending.

The board has been involved in many law suits. One of especial interest was decided last May, in which the court sustained the right of the board to inquire into and determine the moral and professional status of applicants for its certificates, and to withhold such certificates from those whom it adjudged guilty of unprofessional and dishonorable conduct, regardless of the character of the diploma presented. It is hoped that by these means the board may be able to make the public understand that the profession of medicine is an honorable calling, and that only honorable men should be engaged in its pursuit. As an illustration of the work of the board in this regard and the looseness with which medical diplomas are given, we quote from the report the following bit of history: "At a meeting of the board, October, 1882, the certificate previously issued to 'Henry A. Luders,' of Chicago, St. Louis and Collinsville, Madison County, was revoked upon proof that the diploma of the University of Gottingen, on which the certificate was issued to him, had been fraudulently obtained, and that the man was an impostor.

It may be remembered that it was finally ascertained that his name was not 'Luders,' but Lambrecht; and that he was guilty of gross malpractice and brutality during his brief career in Collinsville. He is now known in Bismark, D. T., as William Lambert. After his flight from this state he went to Cincinnati, where he obtained a certificate for a course of lectures at the Cincinnati College of Medicine and Surgery; but upon the publication of his record in this state he suddenly left Cincinnati without completing his

course. He next appeared in Cleveland, where, in July 1882, he married again without going through the formality of obtaining a divorce from his St. Louis wife, whom he deserted when he left Collinsville. During the winter of 1883-84 he attended the Keokuk College of Physicians and Surgeons, and received the diploma of that institution at its commencement in 1884.

His admission to the lecture classes of the Cincinnati school and graduation by the Keokuk College, furnish fresh illustrations of the necessity of the strict enforcement of matriculation requirements and of proof of previous study and college attendance. It is obvious that this man could not furnish 'credible evidence of good moral standing,' nor proof of having attended two full courses of lectures. Nevertheless he was matriculated at both schools and graduated from one."

We have not space to farther direct attention to the work done by this board. That it labors under difficulties, that it fails to accomplish as much as the friends of advanced medical education desire, that in some respects its influence is bad, all will admit. But that it is educating both the profession and the people into a truer perception of the real nature and work of the medical profession most will cheerfully confess. With the advance of public sentiment we shall expect that the board will also advance in its mission to higher requirements and more perfect enforcement of the same. Beyond a doubt a vast number of outrageous quacks still infest the state of Illinois, dishonorable men occupy places in the ranks of the medical profession, but we have faith to believe their number is smaller than it would have been had this board never existed.

In the legislative management of public medical questions, this state and this board have done more and better than those of any other state. In a very real sense it is the pioneer, and is leading the way.

An American Publishing House One Hundred Years Old.

Of itself simple age reveals numerous characteristics worthy of consideration; but when all the years of long life have been filled with deeds respected by the best men and trusted by all, then age becomes a crown of glory. In this country few persons and few creations of man have withstood the changes of one hundred years. Of these few, not an unim-

portant one is the business house of Lea Brothers & Co. With characteristic modesty, the present representatives of this house have issued a little book giving in skeleton outline the history of the origin and development of this house. It was begun by Matthew Carey in 1774. Mr. Carey was an Irishman, and by his enthusiastic adherence to a cause he deemed just, had rendered himself obnoxious to the ruling powers, and was compelled to leave Ireland. When he reached Philadelphia he was entirely devoid of means. But Lafayette, who was visiting Washington, heard of him, and, knowing of his contest for freedom in Ireland, sent him four hundred dollars. On this capital Mr. Carey began business, January, 1775, by issuing the *Pennsylvania Evening Herald*. Other publications followed, with more or less success. An enthusiastic student, with indomitable energy, native tact and unvarying integrity, he made and kept hosts of friends, ever exercising an influence for good over the young nation. Book-publishing followed that of journal. In 1812 Mr. William Blanchard entered Mr. Carey's employ. In 1817 he associated with him his eldest son, Henry C. Carey, and four years later his son-in-law, Isaac Lea. In 1824 he retired from business, ending his days in active efforts for the public good. In 1824 the firm took the name of Carey & Lea. In 1829 the publishing business was separated from the retail business, under the former name. In 1833 the firm name became Carey, Lea & Blanchard. In 1836 Mr. Henry C. Carey retired from the firm, which then became known as Lea & Blanchard. In 1843 the house dropped its general publications and confined itself almost exclusively to its medical publications. In 1851 Isaac Lea retired in favor of his son Henry C. Lea. In 1865 Mr. Blanchard retired from the firm. After a few months Mr. H. C. Lea conducted the business under his own name until 1880. Then the house became known as Henry C. Lea's Son & Co. In January, 1885, Mr. Henry C. Lea retired, and the firm is now known as Lea Brothers & Co.

In all its career this firm has never lost a partner by death. Successively the members have withdrawn to enjoy the fruits of their well directed industry. Their connection with the publication of the *American Journal of Medical Sciences*, and the *Medical News*, is well known to every student of the past two generations. The house has never failed to meet all its obligations, in spite of all the changes which have occurred in the political

and social world. For four generations this house has conducted its business with the endeavor to aid in the diffusion of intelligence and further the higher education of the community. In all dealings it has recognized a moral responsibility. The medical profession has had abundant reason to understand all these qualities, which have become familiar to them, both through the medical books and medical journals published by this firm. A peculiar feature of the members of this house is that they have invariably been men of a broad and liberal culture, equal if not surpassing that of the most successful men in the several professions. Hence they have been able to intelligently conduct their enterprises, not only from the business standpoint, but from the standpoint of the educated man. Farther, they have generally been philanthropists, interested in promoting the well-being of the city of their residence, and the nation at large. Were it possible to separate from the general progress of the nation the influence of this house, we are positive that even the members of the house would be surprised at its vast extent and profound depth.

It is singular that the editors of the medical journals published by this house have had a record similar to the house itself. Under the name of the *American Journal of Medical Sciences*, Dr Isaac Hays began the editorship of this periodical in 1827. He continued to edit it until his death, a few years since, when he was succeeded by his son, who now edits it and the *Medical News*. The *Medical News* was commenced in 1843 as a monthly, but was changed to a weekly in 1882. The influence of these journals has been on a par with the other publications of this house. Few medical scholars but have gleaned much that is best in medical publication from the pages of the old *American Quarterly*. The son of the first editor still edits both of these medical journals—journals not excelled by similar publications in the land.

The name of this house is to-day, as ever in the past, the synonym for intelligence, progressive industry, and incorruptible honesty. The extension of its business, now as ever, means the extension in the country of that which is best in the medical world. Nay, the beginning of the third century of the existence of this firm exhibits as inspiring a record as does the beginning of its second century.

The *Archives of Medicine* announces its discontinuance, Dec., 1884.

Doctors' Fees in Ancient Times.

It is sometimes profitable to take a glance upon the customs of the fathers respecting certain modes of life. In a late issue of the *DETROIT LANCET* we gave briefly the modern customs respecting doctors' fees. Now we propose to give a short sketch of ancient customs in this regard. We shall take our facts mainly from Rogers, on "The Law and Medical Men."

The Roman law regarded the services of the lawyer and physician strictly honorific. The Roman practitioners of law and medicine were usually persons of wealth and leisure, who did not practice for a living. They could not compel by law any payment for services rendered. Indeed, it was considered a disgrace to even allude to a fee. Still, it was a fiction of the law that the promise of an honorarium always accompanied the employment of a professional man. This promise could be sued for at law.

The English common law adopted the theory of the Roman civil law as to the high standing of the profession, but afforded no remedy for the recovery of charges. The surgeon could sue for value of services, but not the physician. It was only in 1858 that an end was put to this anomalous position. By the terms of that act a physician can at law recover compensation for his work, time and skill, as any other worker in any path of life.

At one time charge could not be made for attendance, but only for the medicines furnished. Now both services and medicines can be charged for and recovered in court. All will recollect that the former state of things still exists in the form of a custom among most classes of people to the effect that if a prescription is not written, or medicine given, or some operation done, no fee is to be given the doctor. Such is not law even if it is custom. The law does not require that an express promise to pay be made when services are requested. The broad principle is that when request is made for medical services, there is a corresponding obligation to render adequate compensation for such services. The exact amount to be paid depends upon a variety of considerations pertaining to each case.

As to the amount of the fee, the law sets no limit beyond that of reason. Within this rule the practitioner may charge less or more, according to his own estimate of the value of his services. The greater the eminence of a medical man the larger may be his fee. The French rule is to consider the gravity of the

disease, as well as the fortune and position of the patient in settling the remuneration of the doctor.

The existence of an epidemic does not authorize the making of exorbitant charges.

In some ages and countries law has fixed the fees of medical men. Thus, in ancient Persia the law said that "a physician shall treat a priest for a pious blessing or a spell; the master of the house for a small draught animal; the lord of a district for a team of four oxen."

Again, the medical men attending the old princes of Wales had their fees settled by law. "Thus, for curing a slight wound they were to receive the clothes of the persons injured, which had been stained with blood. For a dangerous wound they received not only the clothes, but also board and lodging while in attendance, and one hundred and eighty pence."

In Egypt practitioners, says Herodotus, were paid from the public treasury, though they could take payment from patients. The right to recover for services does not depend upon a cure being effected. It does not depend upon the issue of a case, whether it be good or bad, but upon the skill, diligence and attention bestowed.

To receive for services, the practitioner must be prepared to show that his work was properly done.

A surgeon may charge for an operation which had a chance to succeed, but not for an operation that could not have been useful in any event.

A medical man cannot charge for treating a case in which there could be no possible good from the treatment.

He can recover if the treatment was such that there was a reasonable chance of benefiting the patient.

In making his bill, the physician should be specific in his charges; he should give the number of visits and dates.

If there be a tariff of fees in any locality, the physicians of that locality are legally bound by this in so far as the public is concerned, and morally among themselves.

To promise an absolute cure in any given case is to arrogantly assume the possession of powers never delegated to man. But if a physician or surgeon promise an absolute cure, he will be held liable for its fulfillment. Contracts to receive a certain sum contingent upon the performance of a cure have always been considered as professionally immoral, and in civil law are repudiated as against public policy.

Moral Training From a Scientific Teacher.

Not long since a prominent physician remarked, in course of conversation, that a certain young doctor, concerning whom the writer was making inquiries, was unreliable, because he graduated at a certain medical college in which the majority of the professors were in a high degree unreliable. "You know," he said, "that a doctor's character is formed largely by his teachers." No doubt there is much of truth in this statement. In some medical schools the student is taught the higher principles of every well ordered life as well as the characteristics of bones, and the physiological action of drugs. We were led to this line of thought by reading Prof. Lane's address respecting the late Dr. Henry Gibbons, of San Francisco. Speaking of his teaching in the Med. Dept. Univ. Pacific, he says, "His lectures were characterized by clearness of thought and directness of expression, which left no doubt or indistinctness in the minds of his hearers. Either from early discipline or from innate mental constitution, his mind never became involved in those webs of obscurity which occasionally becloud the thoughts of most men in public speaking. As in all matters, whether public or private, he took a stand where he believed truth to be, so his utterances as a teacher, besides being clear and logical, ever bore the stamp of honest and clear conviction, and these, as well proved verities, which a truthful heart had tried and proven, carried belief also to his youthful disciples, with whom they remained enduring rules of future action, and whilst he was infusing technical knowledge into the minds of the students, he never forgot, as occasion offered, to drop a moral precept into their hearts. This moral training has borne excellent fruit in the classes which have graduated in this school, who almost without exception are models of sobriety and correct habits, and that his work had thus been fertile in good to him was a source of great satisfaction. To fix the facts in the minds of his hearers, none had a larger fund of humor upon which to draw. In his illustrative story there lurked no double-meaning word or obscene allusion, which long after the fact sought to be taught had been forgotten, is wont to remain as an indelible filth spot in the memory of the listener, for as the accusation has often been justly made that Juvenal, in scourging vice, by his indecent allusions also taught it, so many a famous medical teacher has left a name beclouded with similar fault."

Cant of all kinds is always disgusting to

every honest mind, but earnest belief in that which is health to body, mind and soul is respected even by such as do not practically entertain such belief. Especially true is it that a life that seeks to make its belief its guide in practical duties is honored, in helping others to lead the same sort of a life. We had not the honor of a personal acquaintance with Dr. Gibbons, but from his deeds as from time to time they have reached us we accept as simple honest fact Prof. Lane's sketch of his life. The consolation in his death is that his deeds will live after him and many that he has trained will seek to continue the work he begun. Were all teachers in medical colleges imbued with the importance of moral training of medical students as a requisite for the degree of medical practice, there would be fewer quacks and less call for laws to restrain these quacks, graduates of regular medical colleges, from so practicing their art as to bring ruin and disgrace to their profession. No law can ever supply the defect of a bad medical training, and a medical training by bad medical men is not as good as it should be, or might be. It is illogical to complain of the student who patterns after his professors, when the professors are supported by us in their positions and work. If professors and teachers are all good men as well as good teachers the medical graduates will be in the main good practitioners and good men. Make the tree good and the fruit shall be good. Make the tree bad and the fruit shall be bad. The medical profession of to-day is exactly what the precepts and practices of the professors of our medical colleges have made it.

One More Unfortunate.

From a daily paper we take the following. Cases like it are less infrequent than some would suppose. It is the story of a young lawyer in Concord, N. H., too proud to beg, unable to earn his bread by his profession, and possessing no surplus funds, dying alone from starvation. For two years he had been a member of the Concord bar. He had fair ability, was industrious, temperate, honest. But the profession was full; there was not enough that he could get to do, and he could not earn enough to keep soul and body together. For weeks he subsisted, or tried to subsist on crackers and water. But at last he was found dead in his office. It is more than probable that he did not have his natural vocation. Had he possessed a real genius

for the law, he would have made his way even in the old state of New Hampshire. Most likely he was made for something else. Possibly he might have made a living at the carpenter's bench, or the machinist's lathe, or the blacksmith's forge, or in ploughing and sowing, or in some other of the industrial arts. There is no record of any person following these employments, young and able bodied, dying from starvation even in the stern Granite State, because he could find nothing to do. Mechanics and farmers are always in such demand that at least a living can be obtained from work.

But this unfortunate became a lawyer, probably because he thought or was taught by his relatives and friends that it was more genteel to be a lawyer than to work with the hands for a living. So he died of genteel starvation.

The case is one of a lawyer, but it is not so very infrequent that the same story is told of a young doctor. Oftener they enter upon lives of dissipation, and die dishonored deaths, from the discouragements besetting their pathway. In most large cities there are large numbers of doctors and lawyers who do not make a decent living. In Detroit there are many who could earn large rewards in the industrial arts, in commerce, or in agriculture, but whom a fatal pride keeps in professional life while they slowly starve.

No doubt they and their friends are parties to this great blunder by which a certainty is refused for an uncertainty, a birth right is exchanged for a mess of pottage, but our educational system is not blameless in the matter. It is the theory of the State—as shown by the State's practice—that it is better to be a lawyer or a doctor than a good well-trained mechanic or farmer. If a young man wants to be a lawyer or doctor the State of Michigan throws open the doors of her professional schools and gives him his education for nothing. But if he wants to become a farmer or a mechanic, or a merchant, if he wants to become a producer in any of the arts by which the ground is made to bring forth more for the general good of the race, the State has not assistance to offer. Society and the traditions of the people run in the same channel as the State. Certain it is that both society and the State rule the professional man higher than the mechanic, and furnish a bonus in the way of a free education to every young man who will desert the workshop, the counting-room, or the farm, for a professional career. Certainly, while

this state of things exists, the spectacle will be often seen of young doctors and young lawyers starving, and entering upon all those degrading practices by which a starving man seeks to obtain subsistence for his body. Wrecks will they be of a manhood noble in its nature and magnificent in its possibilities. The remedy is apparent. But we have little hope that the remedy will be applied in this generation. Existing evils must go on until they have wrought out their legitimate results and then when the evils of the present system have become intolerable to the average citizen, we shall have a change. The unfortunate victims of the present state of affairs will come and go like good vessels where attracted by the false light of the old wreckers' fires to the cruel rocks, only to be dashed to pieces by the relentless force of the surging, seething seas of professional life.

The Biennial Attack Upon the Michigan State Board of Health.

It is the fate of all institutions under the control of the State to be subjected to periodical attacks, at recurring sessions of the State legislatures. This is so in every State. In one such spasm the legislature of Massachusetts abolished one of the best boards of health that has existed. This act was and is still a blot upon the fair name of the old Bay State. The work done by that board for the material prosperity of that State, as well as the general cause of sanitation, was simply invaluable. But when the Massachusetts legislator thought his individual wisdom infallible on sanitary questions without any study of the real merits of the case, down went the board. The little work that the conglomeration, which followed the demise of that board, has been able to do for public health, has been insignificant in quantity and inferior in quality compared with what was formerly accomplished.

As a sanitary body the Michigan State board occupies a foremost place among sanitary bodies. In bringing sanitary matters home to the people it has no superior, or equal. It has won for itself, at home and abroad, a reputation honoring the State of Michigan. As we have no interest in the board, other than that of any intelligent citizen desirous of seeing the State of his choice secure to itself the greatest good to all of its citizens, we are able to view the matter as an outsider. From this standpoint we firmly believe that none but an enemy of the best interests of the State of Michigan would en-

tertain a thought of abolishing this board. And yet we see by the *Legislative Journal* for Feb. 18th, that notice is given that a bill will be introduced to abolish this board. The intelligent constituency of this legislator should so arrange matters as to abolish him, if they desire to retain their self-respect in the midst of good citizens.

Doctors, because of their constant study of the evils of unhygienic conditions, are, or should be, even more interested in sanitary matters than the average intelligent citizen. So they should do what they can to prevent the success of any scheme tending to limit or cripple the State Board of Health. This is the one health organization of our State, to which every citizen can honestly point with pride, and challenge the most scrutinizing investigation by those most competent to judge of such matters. Men like the able secretary of the board are rarely found, and still more rarely to be secured for such work. If this board be given the chance to pursue its work, each year will multiply in vastly increased ratio the growth of our people toward better health, from improved conditions of living, toward increased wealth from increased health, and so toward increased prosperity of every sort. Health is wealth, and there is no State aid to health certain and efficient as the aid now rendered in connection with the State Board of Health.

Really, however, we hope that no one will seriously entertain the notion that the people of this State desire the working forces of this board crippled, for we are convinced that they will find themselves woefully mistaken. Too many thousands of our best people have realized the benefits of this board in connection with its sanitary conventions, etc., and the honor it confers upon the State by the high esteem in which its scientific labors are regarded in other States, and throughout the civilized world. The people of the State of Michigan want their State Board of Health encouraged and liberally supported, by any action taken through their legislature.

Poisoning by Rottenness Within the Human Body.

The civilized world is all astir to shut off the causes of human sickness and human death from the decomposition of organic matters outside of the body. Sewer gas, swamp poison, damp dwellings, and a thousand other conditions under which organic decomposition occurs, are sought to be eliminated, with more or less success.

Of the generation of poisons within the body we know less. But some facts are sufficiently established to show that cases of more or less gravity of poisoning do occur from this source. Senator, in *Berlin Klin. Woch.*, described a case in which the patient became collapsed, and nearly died with all the symptoms of poisoning by sulphuretted poison generated in his own intestines.

Dr. Golding Bird has described a group of symptoms, including hypochondriasis, and depression of spirits, produced by an excess of oxalates, as shown by their abundant accumulation in the urine. Poisonous alkaloids have been shown to circulate in the blood.

Bocci (*Arch. per le Scienze Med.*) has extracted from the human urine an alkaloid which has exactly the same action as curare. This alkaloid has the same effect as an alkaloid found by Brieger to be formed from fibrin by the action of gastric juice. Both of these alkaloids, like curare act by paralyzing the peripheral terminations of the motor nerves.

Dr. Brunt shows that the bitterness of gall is not from any normal constituent of the gall itself but from the admixture therewith of some alkaloidal substance or substances derived from digestion. It is well known that in some cases an excessive languor comes on a couple of hours after a full meal rich in nitrogenous substances. Dr. Brunt (*British Medical Journal*) regards this as due to poisoning from alkaloids formed by imperfect digestive processes. In these cases there is a curious weight in the legs and arms, the patient describing them as lumps of lead. The symptoms are extremely like those exhibited by curare poisoning.

In some cases sick headache can be prevented by confining the patient to an exclusive non-nitrogenous diet. It is more than probable, Brunton says, that some headaches, as well as langor, are due to poisonous products derived from nitrogenous food. This field of study is just being opened up, and it gives promise of revelations that shall be most helpful to all, in their endeavors to maintain a healthy state of the body and mind.

A Paradise for Doctors.

A writer in the *British Medical Journal*, January 10, 1885, gives the following as facts respecting the practice of medicine in the Argentine Republic of South America. From all other places comes the dismal wail of too

many doctors, too little paying medical business. He says:

"All medical men here are making fortunes, and there is still room for healthy competition. The ordinary charge at a doctor's office is two dollars, at the patient's house four dollars; for attendance at an ordinary confinement, \$100, but when extra care or attention is required the charges mount up from five hundred to thousands of dollars. Accounts of thousands of dollars are paid without remark. Doctors in good standing, but by no means the best in the profession, recently collected: for extraction of ovarian tumor, six thousand dollars; for amputation of arm, seven thousand dollars, this including besides the operator two assistants; delivery with operation, two thousand dollars; attendance during case of typhoid fever, one thousand dollars, etc. The charges by dentists are on a corresponding scale. The one important condition of this pile of wealth is that every doctor must pass an examination and be licensed by the Government Examining Board before he can practice. This compels him to first master the Spanish language. As the population is very cosmopolitan the more modern languages one can speak the better. There are native doctors in large numbers educated at the free government schools, and to these is added a large number from every nationality of the world, especially of Europe. The general education of the doctors is said to be superior to that which he obtains in England. Here is the chance for the impecunious doctor. Why should he not live in this medical "El Dorado?"

Politics and Medical Institutions Dependent Thereupon.

Among uncertain things political changes have a prominent place. The more corruption enters into politics the more uncertain they are. We have ever held that medical men and medical institutions were wise when they gave politics a wide berth. Better rest their efforts upon something more stable. A capital illustration comes to us from Chicago. That vast city of the plain has a magnificent hospital for the care of the sick poor of Cook County. The *Journal of the American Medical Association* gives the following facts respecting its medical management:

It is under the control of a board of Commissioners, some of whom are elected annually. The board has a rule of electing the members of the medical and surgical staff at

the beginning of each year. It allows each commissioner to name one member of the staff. Of course each commissioner rewards his family doctor, or some doctor who has done him service. Lately it was found that five of the most efficient members of the staff had been left out. These were then elected members at large. The same board elected eight homœopaths. Thus the hospital has now 27 doctors of all sorts.

The central free dispensary, which hitherto has been accommodated in the basement of the Rush Medical College, and used for clinical instruction, was ordered to be removed to rooms in the College of Physicians and Surgeons. Of course personal and political ends are well subserved by this liberty of political moves, but it does not appear that any college can found thereupon a sound clinical instruction which shall be abiding.

What is true in Cook County, Illinois, is as true in every city in every state, with rare exceptions.

Dr. F. S. Gaillard, Late Editor of Gaillard's Medical Monthly.

Having suffered for years from ill-health, Dr. Gaillard died at his home in Ocean Beach, N. J., February 2, 1885. He was in his fifty-eighth year. Born at Charleston, S. C., he was educated at the University of South Carolina, graduated in 1845. His medical studies were pursued at his native place and from the South Carolina Medical College he graduated in 1854. He practiced for a few years in Florida, and then went abroad for a time. During the war he was a confederate surgeon. After the war he settled at Richmond, Va., and started the *Richmond Medical Journal*. Shortly he moved with his journal to Louisville, Ky., giving his journal the name of the *Richmond and Louisville Medical Journal*. In 1874 he started the *American Medical Weekly*. While in Louisville he was the head and front of the Louisville Medical College, and the Kentucky School of Medicine. His life in this respect is well known to the general profession. However his policy might be regarded, his ability and energy in the seeking of his ends was never questioned. Many of those with whom his controversies were most violent have preceded him to the silent land. A few years since he moved with his journals to New York City and at his death the publication was continued as *Gaillard's Medical Journal*. He was twice married, his last wife and her children surviving him. He occupied

a most prominent position during his entire career as a medical journalist. That he exerted a wide influence there can be no question. Dr. P. B. Porter will continue Gaillard's Medical Journal.

How Shall the Insane be Dealt With?

This has been a very perplexing question, concerning which the wise men have long debated. But from late occurrences, it would seem as if it had been decided to burn them up. Since the thirtieth of December, 1884, four fires have occurred in insane asylums. The aggregate loss of life was large as might have been expected from the inadequate arrangements made to protect against fire, or loss of life when fire did occur. The first of these fires was at the Indiana Hospital for the Insane, which contains seventeen hundred patients. The second fire occurred at the Illinois Eastern Insane Asylum at Kankakee, on January 18th. This was attended by great loss of life. The third fire took place at the Indiana Hospital for the Insane on January 27th. The fourth fire was in the Insane Department of the Philadelphia Almhouse. At least eighteen lives were lost. In this last case it is said that many of the victims were bound with chains either by hand or foot. All these were institutions supported by the city or state. No doubt with all possible precautions, fires will occur, but four fires within two months, attended with great loss of life and property, would seem to teach the lesson that unless it was regarded as desirable to burn the insane, as a mode of treatment, it would be wise and profitable to so arrange the buildings in which the insane are kept, and the attention afforded them that the fire danger be reduced to a minimum.

Effects of the Abuse of Coca.

Dr. G. Hartwig, in his work on the Tropical World describes the confirmed coca-chewer thus: "He is known at once by his uncertain step, his sallow complexion, his hollow, lustreless, black rimmed eyes, deeply sunk into his head; his trembling lips, his incoherent speech, and his stolid apathy. His character is irresolute, suspicious and false; in the prime of life he has all the appearance of senility, and, in later years sinks into complete idiocy. Avoiding the society of man, he seeks the dark forest, or some solitary ruin, and there for days together, indulges his pernicious habit. While under the

influence of coca, his excited fancy indulges in the strangest visions, now reveling in pictures of ideal beauty and then haunted by dreadful apparitions." There is no record that even the abuse of tea or coffee produces any such results as these, in any country or among any people. If we are to accept this account as correct, then surely the effects of coca are far different from those of either tea or coffee. The more facts accumulate respecting coca, the more is it evident that it is one of the most remarkable products of South America. With the marvellous effects of cocaine thus far shown we must look for a very thorough study of this drug in every respect.

The Demise of the Index Medicus.

The editors and publishers announce that with the completion of volume six this publication ceases. For six years it has regularly appeared, and is a wonder to every student of medicine in the broad sense who has taken the trouble to investigate its merits. Mr. Leypoldt, at a heavy loss, carried on the publication till his death last year, and his estate continued the volume current. A few more additional subscriptions would have placed the work upon a paying basis, but apparently these could not be obtained and so the publication sinks.

We regard this as a calamity to the cause of advanced medical study, as there is absolutely nothing to take its place. Hereafter the medical scholar will be compelled to wade through vast numbers of volumes in order to get the facts here collated ready for his service. But we shall hope that in some other manner the work may be revived, perhaps in a shape that will secure a more perfect support from the medical profession.

Memoranda.

On Feb. 17, Rush Medical College graduated 151 out of a class of 401.

John Jondro, aged one hundred and twenty-one years, died Nov. 29th, 1884, at his home in Arkansas, Wis.

Dr. J. Knowsley Thornton reports eleven nephrectomies by abdominal section, all of which have recovered.

Mrs. Peck, of Chicago, left over six hundred thousand dollars for the establishment of a home for incurables.

Our knowledge of the anatomy and physiology of the nervous system dates from Herophilus and Erisistratus.

Dr. Harris, of Norristown Insane Asylum, says that the causes of insanity are various, but chiefly alcohol and syphilis.

A writer in the *Druggists' Circular* has been looking up the names given to calomel in the past. He finds thirty-seven distinct names.

Dr. Fancourt Barnes reports a case in which a woman had been delivered six times by craniotomy. Harsh treatment of the children!

Ex-governor Coburn left the Maine general hospital one hundred thousand dollars. Good governor, but then, he was worth eight millions.

J. C. Ayer died worth eight millions of dollars. How much of this was not obtained on the basis of the promise to cure the poor consumptive?

Gaillard's Medical Journal says that it is well known that almost every drug store is to a certain extent a bar room—only they do not pay a liquor-dealers' license.

Benjamin F. Silliman, M. D., died in New Haven, Conn., Jan. 14th, 1885, aged 68 years. As a teacher of science he has left a lasting impress upon his generation.

A correspondent of the *Northwestern Lancet* says of his home in Colorado, "We have no home journal that commands our respect." Rough on his home journal.

Merkel's museum at Halle contains a specimen of the female genitalia with perfect hymen, from a woman who had given birth to a seven-months' child. So says Hyrtl.

Dr. Thos. F. Rumbold, of St. Louis, says that, from actual inquiry among his patients, sixty-five per cent. of those having catarrhal trouble resort to patent remedies for catarrh.

"In Germany the reign of carbolic acid is ended, and that of iodoform is begun," so says a late writer. Iodoform is there used for every conceivable and many inconceivable purposes.

The *Southern Medical Record* complains that "our ablest writers send their articles to the North for publication, where they attract little attention and do no good." Rough on the articles.

Dr. C. C. Graham died at Louisville, Ky., Feb. 3d, in his one hundred and third year,

having practiced medicine longer than most physicians live. He spent his old age in literary and scientific pursuits.

Dr. Edward Warren says that the decadence of French medicine and surgery is due to the fact that the profession has been drawn into the whirlpool of politics. Intellect spent there is at the loss of intellect in medicine.

Aristotle is said to have received eight hundred thousand dollars from the treasury of Alexander, for the making of his collections in natural history. From him came our first definite ideas of the circulation of the blood.

Wilde, the great aurist, said: "So long as a running from the ear is present, we can never say how, when, or where it will end, nor to what it may lead." Would that this were burned into the memory of every doctor.

The *Medical Record* ascertains that, like men, women seek the medical colleges at which they can graduate easiest and cheapest. Besides, they exhibit more than average tendency to adopt quackish methods in actual practice.

There are four claimants to the property of the late Prof. William Darling, of N. Y. This is bad for the claimants, but good for the lawyers, who will probably absorb most of that property which the old doctor pinched himself to save.

So late as the sixteenth century the lectures of the professors in the Faculty of Medicine at Paris consisted mainly of commentaries on the works of Galen and Hippocrates. The supremacy of Galen over the medical world lasted fourteen centuries and more.

In a recent English suit two medical men testified that a certain piece of beef was in a state of putrescence, while one said that it was as good and wholesome meat as he had ever seen. The court was disgusted with the medical men, but he fined the parties selling the beef.

The *American Medical Journal* (Eclectic) councils its adherents thus: "State boards of health and examining boards will live, and we need not fight for their destruction. If we can be represented in these boards, we will live also; if not, then we die." Wise counsel.

The English courts have decided that home lessons set by teachers in the public schools

cannot be enforced. The occasion for the decision was a suit for assault and battery against the teacher for punishment inflicted for failure to get lessons which could only be got by studying at home.

A movement is being made in the Michigan legislature to abolish the homœopathic medical department of Michigan University. A certain number of homœopathic doctors want it to remain, and others want it removed to Detroit, under private control, the State to pay for a portion of its support.

C. Anton Ewald in DuBois-Ramond's *Archives*, reported a case in which a gentleman on lighting his cigar, was astonished to find that inflammable gas was issuing from his mouth. Here marsh gas was formed in the intestines and passed through the orifices of the stomach into the mouth.

In a certain inland town of this State there are practicing in partnership two doctors, father and son, who are both six-footers. As they were walking down the street one day, it was remarked by somebody, that they reminded him of a double-barreled shot-gun—if one didn't kill the other would!

Dr. William Braithwaite died at his home in Leeds, England, Jan. 31st, aged seventy-eight. He is best known by his authorship of Braithwaite's Retrospect, which has been republished in this country since 1840. The Retrospect will be continued under the direction of his son, Dr. James Braithwaite.

Dr. Louis Elsberg died at his home in New York, February 19th. He has been actively connected with the development of laryngological studies in the United States, writing numerous papers, giving the results of his personal work. He has also been a clinical teacher in two medical colleges.

William Wood & Co. announce an index to the volumes of their medical library, to include all the volumes published to the end of 1885. It will appear at the end of this year. As the series will then contain eighty-four volumes, the index will be a large book. It will be sold separately to such as desire it.

Dr. W. G. Wylie says that he always shortens, and sometimes entirely aborts sick headache, by the following plan: As soon as the first pain is felt the patient takes a capsule containing one grain of inspissated ox-gall and one drop of oil of gaultheria, and repeats the dose every hour, until relief, or till six have been taken.

The house at Washington has at last passed a bill appropriating two hundred thousand dollars for the erection of a fire-proof building for the army medical museum library. It will speedily pass the senate, and work can be begun upon it so as to ensure its completion in time for the meeting of the international congress in '87.

Extended observation in the Prussian army by the surgeons have demonstrated that alcohol is a source of harm to the soldiers, so that they have advised its abandonment for tea and coffee. A majority of those suffering from frostbite and sunstroke were addicted to alcohol. Of course these surgeons do not demand total abstinence, but more moderation.

Dr. P. F. Reinsch, and Dr. E. Cutter have been studying with the microscope the dirt in the indentations of old coins. They find innumerable bacteria, and unicellular algæ. There are oscillating bacteria, vibrating, spherical, and dancing bacteria. Dr. Cutter then examined the dirt under his fingernails with the result of finding the bacteria and algæ.

Dr. Thos. N. Reynolds died in San Antonio, Texas, Feb. 14th. For many years he was a prominent practitioner, first at Orion, and then in Detroit, Mich. Hosts of friends will miss his presence, and many patients his professional care. He was lately elected professor of nervous and mental diseases in Detroit Medical College, vice Dr. J. G. Johnson resigned.

The English publishers of *Quain's Dictionary of Medicine* have adopted a new plan to squeeze more money from the English profession. The idea is to issue the work in monthly parts; in this way poor students and impecunious doctors may be induced to purchase it. The binding will of course be extra, and so there will be a farther gain to the thrifty publishers.

Alvelos is the name of the new cancer remedy from South America. It is used by external application, and in its effects resembles jequirity. It was forwarded by the consul at Pernambuco, on the basis of the claim that it had cured cancer. Dr. Smith Townsend, of Washington, cured a case of lupus with it after the disease had lasted 40 years. Its claims as a cancer cure require to be established.

Dr. E. Holden, Sanitarian, says that in

London, Eng., under Sherbourne Lane, and 12 feet below the present pavement is a pavement 20 feet wide, of small bricks laid in mortar; and a wall 12 feet by 10, pierced by two flues, one semi-circular and the other rectangular, the chimneys, undoubtedly of an old mansion. This must have been built before the year 400, for the Romans retired from Britain about that date.

A young Vienna surgeon was convicted of having treated an inflamed finger unscientifically, and was sentenced to pay a fine and repeat his examination. This sentence so affected him that he drowned himself in the Danube. Meantime the verdict was appealed and reversed. The high court acquitted him—after he was dead. Courts as well as doctors disagree. The ruin of health or life is not an infrequent attendant or consequent of their decisions.

Dr. Packard, in the *Medical Times*, speaking of antiseptic surgery, says that it is still *subjudice*. Its able author has shown the absolute value of cleanliness. His peculiar views have a large and enthusiastic following. But it still remains to be seen whether the objects to be sought for and claimed to be thus secured, may not be more effectually attained in other ways. The doubt thus expressed involves not only the method, but also the principle upon which it is based."

Dr. W. H. Long, lately in charge of the Marine Hospital at Detroit has been removed to the Marine Hospital at Chicago. As president of the Detroit Academy of Medicine he was, on leaving Detroit, given a dinner, at which all the members of the Academy united in expressing their regrets and warmest wishes for his increased prosperity. This occasion was a delightful episode in the career of the Academy, not only complimentary to Dr. Long, but helpful in promoting fraternal fellowship in the profession.

Dr. Shæffer, in the *Peoria Medical Monthly*, recommends a mixture of gum camphor and crystallized carbolic acid. On warming equal portions of these substances they form a permanent liquid as do chloral and camphor. This has a pleasant odor, not as caustic as carbolic acid, soluble in alcohol, ether, chloroform, and ethereal oils, but insoluble in glycerine and water. He uses it as a local anæsthetic in treating eruptions due to cryptogams, as an antiseptic. He thinks it a valuable addition to our list of remedies.

"Batty's operation," is the term given to the removal of the normal ovaries. The *Medical News* proposes the name "Semiramis' operation" for the removal of normal testicles. Thirteen centuries B. C. she castrated men in considerable numbers. Those castrated were made overseers and guardians, because they were the more tractable and obedient. Look out for testicles when women doctors come into power. They are likely to disappear, as women's ovaries do under male doctors' sway.

There appears to be a curious custom on the continent of Europe to make the estate of such persons as die in the hotels pay for the re-furnishing of the apartment in which the person died. The *National Hotel Reporter* tells the following: A young lady stopping at a hotel in Paris complained of feeling unwell. A gentleman at once told her that she had better get into a third class cab, as then her friends would only be compelled to pay for the cab, while if she died in the hotel, the cost of re-furnishing the same would be demanded.

Dr. Walter Lindley in the *Pacific Med. Jour.* says that the mortality of children at Los Angeles is remarkably small. The combined death rate from cholera infantum, scarlet fever, and diphtheria for the last seven years has been less than one a month. He gives as reasons for this small mortality, the diurnal breeze from the ocean, which constantly purifies the atmosphere; the constant ripening of fruits all the year round; constant fresh vegetables each month of the year; such constant clear weather that out door life is possible almost every day of the year.

A train was stuck in the snow far west of Winnipeg and the passengers were compelled to aid in clearing the track. Among them was a minister who had come from England for some throat trouble. But he determined to do his share of the shoveling, even if it killed him. So says a writer in the *Century*. He had thin moccasins on his feet, and during the day, they were wet through. That day's work cured him. Other persons were in like manner cured of throat and lung troubles. Perhaps from this we may find a cure in snow shoveling for certain obstinate throat and lung troubles.

A correspondent of the *Journal of the American Medical Association* is impressed with the number of operations for the amputation of the cervix uteri performed in Ber-

lin. He thinks few women in Berlin can have normally preserved uteri. He says the students have a saying that there is not a woman living on the street with Martin's hospital who has an entire cervix uteri. The temptation to resort to an operation for the glory of publishing statistics and for achieving renown is a great one, and is inflicting injury upon gynecology. Indeed, other departments of surgery are not unscathed.

The *Med. Surg. Reporter* says that it "knows of one very prominent old physician in Pennsylvania who would not send out a bill, depending upon the gratitude of his patients for his remuneration; and he did not depend in vain, for though he practiced all his life in a comparatively small city, yet his declining years found him in a very satisfactory financial condition." But his son could not get a living in this manner. He was forced to send out bills or starve. Times have changed, and with them the people, including the medical profession. The trade element is larger, and the professional smaller.

In the Cumberland plateau of Tennessee there is a remarkable immunity from consumption. The tract is 30 miles long by five or six wide, has a population of 6,000 people and has never had a case of phthisis. Dr. Wight, Sanitarian, studied the reasons for this remarkable immunity. He found the inhabitants farmers, primitive in all respects, almost devoid of what we call luxury. They worked and ate, and slept, regardless of the world about them. Their houses were windowless and often doorless. They only sought shelter, and neither consumption nor any other disease found foothold among them.

The *Texas Courier Record of Medicine* publishes a certificate from William Wood & Co., thus: "We consider it (the *Texas Courier Record of Medicine*) now the brightest medical journal published in the west." We congratulate the *Courier Record* upon its exalted position among medical journals of the west. Since William Wood & Co. assert the fact the doubt is ended. We shall next look for the statement that this firm regard our esteemed contemporary as the brightest medical journal published west or east. This will be glory indeed, as the opinion is current in the east that medical journals of the west are of as little account as western medical matters generally. They have yet to learn that "westward the star of empire takes its way."

The *Western Medical Reporter*, referring to attacks upon Dr. N. S. Davis, says: "If there is a man in all this land who has earned the respect and admiration of his professional brethren for his attitude on all questions of professional improvement and interest, it is N. S. Davis. If there is a man who has tried harder, or with more consistency of example for well nigh half a century, to raise the standard of scholarship and of moral character among physicians, or one who has exhibited greater promptitude and uniformity of action in subordinating social claims, pecuniary interests and personal comfort to the promotion of this single object, we should be glad to learn his name."

Under the direction of Dr. Thomson, the Pennsylvania R. R. has caused an examination to be made of all its employés, as regards their eyes and ears. Four per cent. were found to have defective color sense, while about ten per cent. were defective in vision otherwise, or partially deaf. The success of these examinations depended upon the system of tests introduced by Dr. Thomson, by which correct examinations could be made by any intelligent person other than an oculist. Those having defective vision were given work which did not call for perfect eyes. Thus both men and the company were benefited. As the company employs about fifty thousand men, it will be seen that the task was an enormous one.

Dr. Briddon (*Med. News*, Feb. 21) reports a case in which, after abdominal section, a sponge was left in the abdominal cavity, producing death. A recent paper gives twenty reported cases in which this accident had occurred. Tait gives a list of eleven cases, including one of his own. The subject was discussed at the late meeting of the American Gynæcological Society, and several instances reported. Yet, in spite of all warnings, cases are still occurring. How many cases are unreported none can tell. The reporting of such cases when they do occur is worthy of great praise. But it would seem as if it would be wise to adopt some rule respecting the sponges that would render their retention in the abdominal cavity impossible.

The St. Louis *Medical Journal* tells of a recent experience of its editor. A person having testimonials and a plausible address, came to St. Louis and secured from the editor the publication of an article, and many other professional courtesies. Soon, however, from

a notice in the daily prints the editor found that the stranger had "taken him in," and that he had been helping a quack. It was no long time thereafter that the newspapers chronicled the fact that this same stranger, while lying in the street, late at night, had been run over by the "Black Maria." For all such he wishes a similar fate. We have learned of quite similar transactions in other cities, and certainly endorse the editor's prayer.

At fourteen of the dispensaries of New York, says the *Medical Record*, there were treated during 1883, two hundred and thirty thousand persons. Of course this does not include the vast number of smaller dispensaries, out door departments, etc., the vast numbers of persons treated in the free hospitals, or the charity patients of each physician. The writer says that in making a professional call he was obliged to pass five of these institutions, and near two more. Wonderful provision for giving the poor medical and surgical attention! Marvelous charity on the part of the medical profession! How the profession seeks work for no pay, and still boards itself. Half of New York city, according to these figures, must in a medical sense be paupers.

A movement is being made by some regulars and homeopaths to cause a new medical bill to pass the Michigan Legislature. We have not been favored with a copy of the bill, and so cannot judge of its merits or demerits. Thus far all legislation tending to regulate the practice of medicine has done Michigan more harm than good. Perhaps the new bill is an exception. The existing medical law is simply worse than useless. Still, laws to regulate the practice of medicine are all the rage, and Michigan cannot expect to escape an attack. If it was possible to have an independent competent board before whom every person desiring to practice medicine must pass, diploma or no diploma, we should be satisfied to see it tried. As the proposed bill becomes public we will further consider it.

The University of Vermont advertises in the *Medical Times and Gazette* to confer the degree on registered British medical practitioners without requiring attendance upon lectures. An examination only and thirty dollars will be required. As to the extent and thoroughness of the examination, the advertisement is not explicit. More of this here-

after. Just now it does not strike us favorably that a medical school should openly advertise itself as a diploma mill. However, if it can be abundantly shown that all the diplomas are worthily conferred, there is no reason why diplomas should not be sold as well as beefsteak. As the diploma costs but a trifle, most of the thirty dollars can go into the coffers of the professors. But certainly thirty dollars is a small sum to charge for a thorough examination by each of the professors of a medical school.

The consolidation of the Detroit Medical College with the Michigan College of Medicine is announced. Basis of consolidation is that the consolidated school shall include all the members of each faculty. It is to be hoped that this new combination will result in a school with the most advanced requirements. The graduates of each school are anxiously looking to see which name and organization will be placed at the head of the new school. Which list of graduates is to be without an Alma Mater? Details are said to be working out, and soon these and numerous other questions will be answered. It will be remembered that efforts for consolidation have been more or less continuously made for a long time. It is to be hoped that the present move will be more successful than that made some years ago to consolidate the two Medical colleges of Cleveland. These did not stay consolidated, and their last state was worse than the first.

Editor's Book Table.

Pepper's System of Practical Medicine.*

The first volume of this work lies before us. It is devoted to pathology and general diseases. Four other volumes are to follow, discussing the several departments of practical medicine. Briefly, it consists of a series of monographs on the several subjects discussed, bound for convenience in a series of volumes, each containing several monographs.

The writers are restricted to this continent, practically to the United States and Canada.

*A SYSTEM OF PRACTICAL MEDICINE BY AMERICAN Authors. Edited by Dr. William Pepper and Dr. Louis Starr. Vol. I.—Pathology and General Diseases. Philadelphia: Lea Brothers & Co., 1885. Sold only by subscription. Price: \$5.00 in cloth; \$6.00, sheep; \$7.00, half Russia.

The reason for this limitation is that for once the views of the practitioners in this region may be adequately expressed in a collective form. Beyond a doubt, the climatic and race conditions here existing make the practice of medicine different in many respects from that called for on the European continent.

Writers have been selected from every portion of the country, and generally those most prominent in their several branches are selected to write the articles upon these branches. Doubtless in many instances other and better writers might have been obtained; but to one who is compelled to judge, as has Dr. Pepper, from their reputation as exhibited by their prominence in medical journal articles and medical college connections, it must be confessed that the selection has been on the whole judicious.

The practical nature of the work has compelled the omission of bibliographical lists, numerous references and extended discussion of theoretical views. We regret that it was felt necessary to omit illustrations, as these, if well selected and executed, would teach much that cannot so well be presented by words.

The size of the volumes is to average about one thousand pages. They are bound in the variety of styles in which this firm issue their best books.

The volume before us has four articles on General Pathology and Sanitary Science, and twenty-eight upon General Diseases.

In the first list we have General Morbid Processes, by Dr. R. H. Fitz; General Etiology, Medical Diagnosis and Prognosis, by Dr. Henry Hartshorne; Hygiene, by Dr. J. S. Billings; Drainage and Sewerage in their Hygienic Relations, by Dr. C. Geo. Waring, jr., C. F.

Of the General Diseases, Dr. James H. Hutchison discusses Simple Continued Fever, Typhoid Fever and Typhus Fever; Dr. William Pepper, "Relapsing Fever;" Dr. J. N. Hyde, "Variola," "Varicocele," "Erysipelas;" Dr. Frank P. Foster, "Vaccinia;" Dr. Lewis Smith, "Scarlet Fever;" Dr. W. A. Hardway, "Rubeola;" "Rotheln;" Dr. S. M. Bemis, "Malarial Fevers," "Yellow Fever;" Dr. John M. Keating, "Parotitis," "Pertussis;" Dr. A. Jacobi, "Diphtheria;" Dr. Alfred Stille, "Cholera" and "Cerebro-Spinal Meningitis;" Dr. J. C. Wilson, "Leprosy;" Dr. H. D. Schmidt, "Dengue;" Dr. James Law, "Rabies and Hydrophobia," "Glanders and Farcy," and "Anthrax;" Dr. B. A. Watson, "Pyæmia and Septicæmia;" Dr. W. T. Lusk,

"Puerperal Fever;" and Dr. D. S. Simmons, "Beri-beri."

The whole closes with a most carefully prepared index, enabling the student to find any desired point in the book with the least trouble.

Most of these writers are well known to the medical public which reads the current medical journal literature. Their particular views are also pretty well understood. Hence it is not to be expected that this volume contains anything absolutely new. Its object is quite different from this. Its writers only aim to condense within the smallest practicable space the essential facts on each subject as it should be studied by the general practitioner. Specialists will doubtless be interested to read the condensed summary of the work of other specialists in other directions. Hence, as helping each to keep closer track of the actual progress of the other, this work will prove of great advantage. Of course, for the general practitioner, for whom it is specially designed, all subjects have more or less intense interest.

Of the separate articles we can speak but briefly.

Under the head of General Morbid Processes, Fitz discusses: Inflammation; Thrombosis and Embolism; Effusions; Degenerations; Tuberculosis, and Morbid Growths. As a whole this chapter is a most admirably prepared article. The portion devoted to Tuberculosis will be read with most interest, owing to the recent changes in views as to its pathology. His presentation will be both interesting and instructive to all readers. Koch's discoveries are fairly presented, as also those of his opponents. He says: "The discoveries of Koch show that the production of tuberculosis is dependent upon the presence of distinctive bacilli, and that these bacilli are present not only in miliary tubercles, but in scrofulous glands and joints, in cheesy inflammation of the lungs, and in nearly every distemper of animals." As bacilli are to be regarded as the virus of tuberculosis, so their introduction into the human body is necessary for the production of this disease in man. It is obvious, however, that other factors than the virus are necessary, for not everyone exposed to the reception of tubercular bacilli becomes tuberculous. The methods of detecting the bacilli are fully given. To it he adds such other knowledge as will enable the practical student to prosecute this line of research.

Hartshorne in his discussion of the etiology

of disease gives abundant space to the presentation of the prevailing views respecting the relation of various parasites of microscopic size to the production of the several forms of disease. Speaking in a general way he says, "Altogether the strongest arguments are on the side of the view that the micrococci, bacilli, etc., cause diseases, not as parasites, living upon their victims, but as poison producers infecting them. The germ then continues to be in the position of a general hypothesis, and not that of an established doctrine of etiological science."—"The present may almost be said to be, in the history of medicine, an era of mycopathology. In his article upon hygiene, Dr. Billings presents a large number of most important considerations readable, and suggestive. Thus in treating of personal hygiene he says, "The manner of serving food independent of its cooking, is not a matter of such small importance that the physician can afford to overlook it, and he will succeed best as a practitioner who best appreciates the influence of a cracked goblet, a chipped saucer, a soiled napkin, or, on the other hand, a hot plate or a touch of color in the shape of a leaf or flower may have upon the capricious appetite of the sick."—"The secret of success in the diet of convalescence lies mainly in the simplicity of the individual dishes, in varying the different meals, in the manner of serving, and in carefully observing the effects on the sick person and being guided by the results." He mildly suggests that the younger physicians do not pay sufficient attention to their own health. "The possession of a medical diploma does not prevent the evil effects of irregular and hurried meals, insufficient sleep, exposure to inclement weather, and lack of systematic exercise; and too much tobacco, sometimes too much alcohol, and in exceptional cases too much study and literary work, so often combine with anxiety about individual patients or with pecuniary worries to damage the digestion and nervous system of the young practitioner that the wonder is that so many survive the ordeal. And in fact the mortality among physicians under the age of thirty is higher than that of any other profession during the same period of life."

Again under the head of public hygiene he discusses the notification of infectious diseases. He says, "The compulsory notification of infectious diseases to the health authorities is a matter presenting much greater difficulties than that of certificates of causes of death. The state has no right to require

such notification from the physician without giving him some *quid pro quo*, and it is not expedient to make it compulsory, even with payment, except from physicians employed by the State or municipality, to furnish gratuitous medical attendance to the poor. The State has the right to require this information from the householder, and it has also the right to require the physician to notify the parent or householder as soon as he recognizes the existence of the infectious disease." The entire chapter treating of this most important and difficult subject is dealt within such a common sense manner that we could wish that not only every physician but every intelligent person should read it carefully. The subject of health officers' qualifications leads him to emphasize the fact that such a person to be really competent should have special knowledge and special training, like all specialists. "And of all professional and educated men the physician should recognize his own ignorance. When he is asked what one should take in dyspepsia or pneumonia his answer is, 'Take the advice of a physician,' and so when he is asked how the plumbing of a house should be arranged, how a hospital should be ventilated, how a city should be sewered, how a marsh should be dealt with or a water supply provided he should reply, 'Get expert advice and supervision and be prepared to pay the amount necessary to secure it.'"

In his paper on drainage and sewerage, Mr. Geo. F. Waring says that he would not permit any stationary washbowl to be placed farther than a very few feet from a vertical soil pipe, and never to admit of their use in bed-rooms or closets leading from bed-rooms. "At the risk of seeming extravagant, I would say that the stationary washbowl as ordinarily used is one of the most uncleanly of modern household appliances."

Dr. Jacobi says, "After all it does not appear that the bacteria question in diphtheria has come any nearer its solution in the last few years, in spite of most eager researches and in spite of the fact that some of the best medical names in the world of medicine take the parasitic nature of diphtheria for granted." The views in general respecting this disease are much the same as those presented in his work on diphtheria.

The article on cholera by Dr. Stille is especially timely in view of the liability of an epidemic during the approaching summer. Abundant proof is afforded of the fact that water is the common mode of transmitting cholera from one person to another; also that it is often

transmitted by the air. The link which unites into one whole the causes, symptoms and lesions of cholera, is the gastro-intestinal flux. This produces the vomiting and purging; this prostrates the patient and wastes away in a few hours the fullest form; this chills the limbs and afterwards the trunk; this thickens the blood so that the capillary vessels can no longer convey it; this spreads a cyanotic shadow over the entire surface of the body; this cuts off the supply of blood from the heart and lungs; this paralyzes the ganglionic and cerebro-spinal nervous system; this obstructs the kidneys and arrests their secretion; acting through these several ways, this causes death. What is the cause of this flux? It is a specific poison which originates in Hindostan and being taken into the stomach and bowels produces the well-known result. What is this poison? The answer cannot as yet be given.

Space fails us to further call attention to the several papers in this work. As a whole they are simply admirable, creditable in the highest degree to American medicine. There is every reason to believe that the remaining volumes will be equally well written, and if so, this work will be unequaled at the present day, as a work on practical medicine for the live practitioner of medicine who is reasonably well educated.

Clevenger's Comparative Physiology and Psychology.*

This volume contains views published by the author in the pages of the several medical journals devoted to the discussion of these subjects. For 11 years he has been pursuing his investigations, a portion of the results of which labors are condensed in the work before us. He has personally studied savages, infants and all classes of living men and women, sick and well, and thus his material of an original character has been obtained. His aim, he tells us, is to elaborate as far as possible, a practical mental science which will reconcile the observations of anatomists, psychologists, and pathologists with direct reference to the more intelligent treatment of insanity. Of course he has availed himself of the results obtained, and the methods em-

*COMPARATIVE PHYSIOLOGY AND PSYCHOLOGY.—A Discussion of the evolution and relations of the mind and body of man and animals. By Dr. S. V. Clevenger. Chicago: Jansen, McClurg & Co. 1885. Cloth, pp. 247. Price \$2.00.

played by all other workers in this same field.

His method of study is that employed by Herbert Spencer in his study of mind. Hence we find the work to be really an extension of Spencer's psychology. He claims that the drift of physiological inquiry has been steadily towards the recognition of sensation and memory, and all the vast subsidiary mental processes, correctly and incorrectly called emotions, feelings, cognitions, etc., as modes of chemical energy. With him, mind is on the same plane as chemical affinity. He says: "Let mind and chemical affinity be alike considered as in their essence unknown; let them be honestly regarded as alike in the matter of present understandability, and admitting that we do assume, in claiming this, relationship of mind and chemical affinity, we claim that the assumption will be fully justified by the deductions." This furnishes the key to the entire work. With wide scholarship the idea is worked out in a most interesting manner.

To illustrate. He says that the idea of sexual appetite is primarily one of hunger. The cannibalistic *amæba* does impregnate itself by eating one of its own kind, and we have innumerable instances among *algæ* and *protozoa* of this sexual fusion, appearing very much like ingestion. Crabs have been seen to confuse the two desires by actually eating portions of each other while copulating; and in a recent number of the *Scientific American* a Texan details the *Mantis religiosa*, a female, eating off the head of the male mantis during copulating. Some of the female *Arachnida* find it necessary to finish the martial repast by devouring the male who tries to scamper away from his fate. The bitings and even the embrace of the higher animals appear to have reference to this derivation."

Again, "The hunger-pain and appeasing hunger-pleasure are due to, and consist in chemical tensions and release from tension, the absence and presence of certain molecules."—"Desire, feeling, sensation, reside in every living cell in the body, and are not seated entirely in the nerve tissue." He dwells at length upon the evidences given by human anatomy and physiology, that man originally walked on four feet instead of two. In relation to this he says: "If we are to believe that for our original sin, the pangs labor at term were increased, and also believe in the disproportionate contraction of the pelvic space being an efficient cause of the same difficulties of parturition, the logical

inference is inevitable that man's original sin consisted in his getting upon his hind legs." In practical applications of this view, gynecologists cause their patients to assume the prone position for the purpose of restoring uteri to something near the natural position. Brown-Sequard recommends the drawing of the blood away from the spine in myelitis, by placing the patient on his abdomen with hands and feet somewhat dependent. In another connection he says: "Mind is located in every living cell in the body, and the better nervous associations of these cells constitute grades of intelligence." Again: "Instinct, reason, memory, are thus but modes of cell adjustment and operation; and the instinct producing less disturbance than the reason impression, so the memory exercised in reasoning is of a more noticeable character than the memory evoked in instinctive motions, because the instinct and instinct memory are facile workings of the cell, while reason and the reasoning or thought memory, are difficult, in degree, workings of cells, in which or for which adjustment is incomplete to the impression. As soon as the adjustment is made the reason, thought, ceases and instinct begins. Again: "The intimate association of all forms of disgust with stomach and intestinal distress was fully shown by a westerner, when looking over a hotel register, promptly deposited his just eaten dinner thereon upon seeing Oscar Wild's name inscribed in the record. An antipathy to the dudesque was coupled in this case to an irritable stomach."

This work is of unusual interest to all students of the subject of physiology in its widest relationships. Few, doubtless, are prepared to accept the author's peculiar views, but all will be interested in their study, and by their suggestiveness derive positive benefit.

Rogers on The Law and Medical Men.*

The law has a definite bearing on medical men as upon each other class of citizens. This is to protect one from the other, and each from the laity and the laity from them.

The author of this work is a lawyer, and of English descent. These points are important, as they indicate to some extent the scope of the work. It is English and it is

*THE LAW AND MEDICAL MEN. By R. Vashorn Rogers, jr., Barrister-at-law. Toronto, Canada: Carswell & Co. 1884. Cloth, pp. 204. For sale by John Macfarlane, Detroit.

legal, although not technically so. In England the first practitioners of medicine were the Druids. Their practice was an adjunct to their duties, as philosophers, as theologians and as soothsayers. To increase the power of their remedies they inspired a belief in charms and incantations. Their panacea was the mistletoe, and the remembrance of this remedy still lingers with the English people, in their observances of days and events. The Druid was an herb doctor, a believer in the faith cure, and a homeopathist, as he took a diseased plant to cure a diseased body. There were also women doctors, reaching varying degrees of eminence.

From the tenth to the twelfth century the practice of medicine in England was almost exclusively in the hands of the monks. So lucrative did they find it that they neglected their monkish duties for those of medical practice. In 1163 it was enacted by the Council of Tours that no clergyman should perform any bloody operation. Then the practice of surgery fell into the hands of smiths and barbers, who had previously been trained as assistants and dressers to the monkish operators. Gradually the barbers absorbed the entire practice of surgery. In 1461 the barbers became so important that they obtained from Edward IV. an incorporation under the title of "The Company of Barbers in London." No one could practice surgery except the members of this corporation. Though this organization continued during the reigns of several kings, there gradually was formed a body of men who practiced pure surgery. These formed a company called the "Surgeons of London." In 1540 by act of Parliament these rival companies were united under a common name.

In 1743 the surgeons ousted the barbers and received a title and the privileges of the old company. In 1800 this company was called "The Royal College of Surgeons of London." This was changed in 1843 to the "Royal College of Surgeons of England."

During the middle ages there were many women practicing medicine. In Italy, at Salerno, women prepared drugs, and cosmetics, practiced among persons of both sexes, took doctor's degrees, wrote treatises on medical subjects, had royal authority to engage in the art of medical practice. In the University of Bologna as late as 1760 Anna Morandi Manzolini filled the chair of anatomy. She was a wonderful teacher of this science, attracting students from all Europe. Maria delle Donne was professor of medicine and

obstetrics in the same college in 1790. All over Europe women, till far in the early portion of this century, were permitted to practice medicine. In the early settlement of the American colonies women were forbidden to practice medicine, probably for the same reason that they were forbidden to speak in public meetings. But for a long time they have had perfect liberty to study and practice under the same laws as men.

We have not space to dwell here and now upon the laws relating to other questions pertaining to medical men. But we are certain that every doctor will be both instructed and interested in the presentation of these questions here made. The book is written in a most entertaining style.

Dowse on Neurasthenia.*

This little book is an enlargement of an essay on Nervous Exhaustion read before a London medical society several years ago. This is the second edition of the work in its present form.

The author calls attention to some anatomical facts which exhibit in a striking manner the relationships of the nervous system. For instance: In the development of the protoplasmic cell a membrane forms which divides into three layers; one of these, the "hypoblast," forming the general lining membrane of the internal portions of the body; one, "mesoblast," originates the tissues and organs of the body generally, excepting the brain and the outer skin of the body, which are formed from one and the same layer—the "epiblast." The powers of the ganglionic nerve cells and the nerve fibers are well illustrated. He then endeavors to maintain the following propositions:

"Man is the highest type of the combination and correlation of all known and unknown forces. We call this force nervous or vital force. One man is superior to another man by the development, organization and adjustment of vital force. Health is the resultant. Disease and death are the natural outcome of defect in the due formation and elaboration of this force. Nervous exhaustion is the forerunner and prime agent in the production of all diseases, functional or organic. Each nerve cell, or recipient element,

*THE BRAIN AND THE NERVES, THEIR AILMENTS and their Exhaustion. By Dr. Thomas Stretche Dowes. New York: G. P. Putnam's Sons, 1884. Cloth, pp. 150 For sale by John Macfarlane.

is united with its fellow, and ever ready when called upon to perform a certain amount of work, and when not called into action it is silently storing up energy and force. Excitement may arise in a nerve cell independently, without any visible external irritant. Nerve cells can transfer the excitement from one fibre to another. They can receive an excitement transmitted to them, and transmute it into conscious sensation. They are able to cause the suppression of an existing excitement. All movements which occur independently of the will are called automatic. All movements which are subject to the power of the will are called voluntary. Automatic movements, which are inappreciable in health, produce subjective sensations in disease and nervous exhaustion. Movements which in health can only be engendered by voluntary effort, are engendered automatically and incoördinately in states of disease and nervous exhaustion." He gives the characteristics of a healthy nerve thus: "To create nerve force, energy, power; to store up nerve force, energy, power; to maintain its own capacity for the reception of impressions; to impart nerve force, energy, power, in definite quantity and quality; to correlate its own special function with that of its neighbors; to resist impressions with which it has no natural connection; to insure its own nutrition; to maintain a normal state of tension; to adapt itself to its environment."

Practically the substance of the volume is much like that of Beard's writings. The author regards Beard as the most accurate writer upon this subject, because he was himself a neurasthenic. It is, however, well worth the attention of all practitioners.

Savage on Insanity and Allied Neuroses.*

The author tells us that this book is an effort to place before the profession what he has learned from books and experience during a considerable period of time. It is an account of stock. From this basis he describes insanity and traces its life history. He explains the legal relationships of the insane, and makes plain the duties of the physician who has to be responsible for their welfare.

The style of the book is quite easy and

pleasant to read. The author has ventured to add many wood-cuts illustrating the photographic appearances of many of the states of insanity. In his definition of insanity he takes pains to separate from it both eccentricity and genius.

Eccentric people may belong to two classes: Those who have some insane inheritance, and those who are passing from sanity into some form of mental disorder, and who may again pass through this border-land on recovery. Eccentricity may be developed *de novo*, just as certain forms of mental perversion are developed. It is a necessity that certain persons of unstable disposition, being surrounded by unnatural circumstances and conditions, should develop abnormal properties. Thus, the person of niggardly disposition, having begun by collecting pins, sardine boxes, and horse-shoes, may end by shutting himself up in an attic, in refusing to wear clothes, and being unwilling to wash for fear of using soap and water. Such persons are looked upon as eccentric. In fact, any of the properties of a sound mind, if unrestrained, and stimulated to abnormal growth, tend to make man first eccentric and afterwards form the basis of an attack of insanity.

Genius, on the other hand, is associated with some incomprehensible faculty for the dramatic portraiture of self-existing abnormal emotions; or altogether dependent upon a simple over-development of an individual faculty of the mind. The first of these constitutes a genius for art, and the latter a genius for science. Defined in this way, it is unusual to find in an insane asylum persons having unusual capacity in any direction. Want of balance, fairly describes the mental condition of many a genius. How often does it happen that a man of taste and energy objects to being controlled in his lower or more animal tastes. So it happens that many men of genius have given themselves over to license.

Among the occupations which tend to cause insanity he classes that of the English governess. This seems to be a calling which multiplies the demoralizing tendencies of the school-teacher by at least a score.

We have not space to further direct attention to the specific features of this book. Throughout it is remarkable in its power of suggestion, and its attraction to the real physician. Being a small book, it does not require any great length of time to read. Being in the form of a student manual, it is likely to be overlooked by those who should read it.

*INSANITY AND ALLIED NEUROSES, PRACTICAL AND CLINICAL. By Dr. George H. Savage. With illustrations. Philadelphia: Henry C. Lea, Son & Co., 1884. Cloth, pp. 544. For sale by Phillips & Hunt.

Dalton's History of Physiological Opinion and Discovery in Regard to the Circulation of the Blood.*

This is a work of great interest. Having mastered the facts of the blood circulation as understood to-day, we are apt to entirely forget, if indeed we ever understood the long and tedious labors through hundreds of years and thousands of minds by which these results were reached. From Aristotle to Harvey intervenes a long stretch of persons, and of agencies, directly or indirectly engaged in working out the problem of the circulation of the blood. Indeed, many problems connected therewith still await solution. Dr. Dalton has done excellent service in delineating, as in the work before us, the story as far as it is possible to write it now. As one thus reads and ponders on his reading, the question arises in his mind, will as great advances be made in this subject during the next three thousand years?

Galen was a Roman, but all his works were written in Greek, because at that time the Greek language was used for the text of all scientific works. After this Latin became the common language of all medical writers. Even two hundred years since it was regarded as unprofessional to publish a medical work in English. Even as late as 1841 Otto published in Latin his "Monstrorum Descriptio." But little by little the English tongue is taking possession of all peoples and languages. It is the medium of the conquering race. To be appreciated this book must be read at leisure. It should be in the hands of every medical student as well as in every medical library. Dr. Dalton's pleasing style renders the reading of this book a genuine pleasure.

James On the Therapeutics of the Respiratory Passages.†

The author distinctly asserts that this book was not written for undergraduate medical students, but for active practitioners. And yet as we have examined it we find little that would not be profitable for students to know.

*DOCTRINES OF THE CIRCULATION. By J. C. Dalton, M. D. Philadelphia, Henry C. Lea's Son & Co., 1884. Cloth, pp. 396. For sale by Phillips & Hunt, Detroit.

†THE THERAPEUTICS OF THE RESPIRATORY PASSAGES. By Prosser James, M. D. New York: Wm. Wood & Co. 1884. Being the November number of Wood's Library of Medical Authors. Cloth, pp. 316. Sold only by subscription.

Why should not students be interested in the study of the subjects of the several chapters, as "Nutrition in Relation to Therapeutics," "Respiration," "The Proximate Principles of Foods and Food Stuffs," "Preparation of Food-Stuffs," "Variations in the Digestive Process," "Aliments as Remedies," "Iron," "Phosphorus and its Compounds," "Aids to Digestion," "Transfusion," "Beverages," "Exercise and Rest," "Alcohol," "Denutrients," "Antipyretics," "Neurotics," "Pneumatics," "Topical Pneumatics." From this list of the several chapters it will at once be apparent that the burden of the book is general and local nutrition. With the author the therapeutics of the respiratory organs has a broader scope than is often given to it by writers on this subject. Perhaps it was this fact that induced him to make the remark that his writing was not designed for medical students. He does not give us any remedies by which we can with certainty destroy the bacillus tuberculosis, or for what matter any other micro-organisms found in connection with diseases of the respiratory passages.

On the whole it is a readable book, useful to all readers, honest in its exposition of truth, and fairly representative of the best medical thought on the subjects discussed.

Fifth Annual Report of the Massachusetts State Board of Health, Lunacy and Charity. Supplement of the Department of Health.*

This report contains many good papers, the best that could be expected under existing conditions. Among the papers is one upon the inspection of food. It appears from this that the ratio of milk cows in Massachusetts is less than in any other state but one. It has steadily diminished from one cow to each seven and six-tenths inhabitants in 1850 to one in eleven and eighth-tenths in 1880. As an illustration of the bearing of these facts upon the public health, the following is given: "A farming town of small population, not twenty miles from Boston, has had usually several hundred cows feeding in its pastures and supplied with the best fodder both in the stable and out. For more than 50 years cholera infantum was unknown in the town, and infants rarely died within the

*FIFTH ANNUAL REPORT OF THE HEALTH DEPARTMENT OF THE MASSACHUSETTS STATE BOARD OF HEALTH, LUNACY AND CHARITY. Boston: 1884. Paper, pp. 283.

first year of their life. Recently the march of population has encroached upon its borders and the pasturage has become considerably curtailed, while the number of cows to supply the demand of neighboring towns has increased. As a consequence, in many instances, brewers' grains and other artificial kinds of feed or industrial residues have been introduced for milk production. Within these past few years cholera infantum has become quite common in the town."

By actual examination the milk supplied to the city of Boston is the poorest of any sold in the towns east of Worcester.

An excellent paper upon the poisons from wall paper reminded us of the excellent work done by Prof. R. C. Kedzie in the study of this same subject while a member of the Michigan State Board of Health. Now, as then, poison floats from many beautiful wall-papers to the systems of those who breathe the air of the inhabited rooms. A large number of cases are presented in which varying degrees of poisoning was induced by these poisonous papers.

An Aid to the Study of Climate.*

Some diseases, and especially phthisis pulmonalis, are to no great extent amenable to medicinal treatment. And yet a very large proportion of the adult members of all thickly settled countries, and many not thickly settled, die of this disease. To find some way by which this disease might be prevented or cured in its earlier stages, has been the study of a very large number of physicians and others. Of late years Dr. Chas. Dennison, of Denver, Colorado, has done a considerable of excellent work in this direction. His latest task has been to present in map form the statistics obtained by the several signal service observers in their stations all over the United States. These statistics include the humidity the elevation, the temperature, the equability of each station. Dr. Dennison has hit upon the idea of grouping these in the form of pictorial maps, so that by a glance could be seen the exact degree in which these elements exist at any one spot in the states. Farther, he has given the same facts in different maps

*DENNISON'S CLIMATIC MAPS OF THE UNITED STATES, graphically illustrating cloudiness, with isotherms, precipitation lines, winds and annual tables. Compiled from data of the Signal Service Bureau, by Charles Dennison, Denver, Col. Published by Rand, McNally & Co., Chicago, Ill.

for summer, for autumn, for winter and for spring. Different colors and lines are employed to make the facts plainer and easier to grasp at a moment's study. Any intelligent person as well as any physician can readily understand these maps. The idea is a happy one and we hope the map will find a place in the office of every physician as well as in the homes of all students of nature. In this manner more exact ideas respecting climates, absolute and relative, will prevail among both the laity and especially the medical profession.

The maps before us are very attractive, not only to adults but to quite small children. In fact they are simplicity itself.

Milne's Principles and Practice of Midwifery.*

The first edition of this work appeared in 1871, and the second edition in 1878, from which this American edition seems a reprint. At least there is no evidence to show that revision has taken place since the latter date, more than six years ago. Of course there has not been discovered a new obstetrics during the past six years, but there have been many changes, important alike to the student and practitioner.

The author lays especial emphasis upon the care for the second stage of labor. He believes that his practice is the best devised for the management of this. Be that as it may, it is certain that his work is a readable one, and in the main representative of the art and science of midwifery as it was understood when the book was written.

Kitchen on Consumption.†

This work was evidently written for popular distribution among the laity rather than for the medical profession. It is a readable account of this disease, and will doubtless be of excellent assistance in instructing the people.

*THE PRINCIPLES AND PRACTICE OF MIDWIFERY, With Some of the Diseases of Women.—By Alexander Milne, M. D. Illustrated. Second edition. Birmingham & Co., New York. Price \$2.00. For sale by John Macfarlane, Detroit, Mich.

†CONSUMPTION, ITS CAUSES, NATURE AND CURE.—By J. M. W. Kitchen, M. D. G. P. Putnam's Sons, New York. Cloth, pp. 221. Price \$1.25. For sale by Phillips & Hunt, Detroit, Mich.

Illinois—Sixth Annual Report.*

From time to time we have noticed the varied contents of this volume as portions of it in the form of reprints have reached us. Hence our readers are aware of the main facts respecting the work of this board. Its principal work has been with the regulating of the practice of medicine. In the report before us we have the most complete and accurate account of the American Medical Colleges to be found anywhere. The list of all the registered physicians in Illinois is also given with the principal facts of their professional record. Many facts respecting the work of the board as bearing on the public health are also given. But the strong point of the report relates to medical colleges and the regulation of the practice of medicine. In this respect the volume is of infinite service to all students of medical matters in this country. Again we stop to congratulate the board on the tangible results of its work. May they constantly increase.

Belfield on the Diseases of the Urinary and Male Sexual Organs.†

The works on this subject are numerous, and many of them very able in their presentation of the facts as now recognized by the profession. The author's aim has been to present a resumé of the latest additions to this field of literature, and such comments as his own experience and observations dictated. Especial emphasis has been laid upon diagnosis. In the space and time at his disposal he has been unusually successful in attaining his wishes. From his previous studies in connection with micro-organisms, it was to be expected that the part these play in genital disorders would be fully set forth. Such is the fact. All the latest modes of determining the exact composition of the urine are fully detailed. Unquestionably this forms a solid addition to the library of which it is a part.

*SIXTH ANNUAL REPORT OF THE STATE BOARD OF Health of Illinois, with two appendixes, a conspectus of the medical colleges of America revised to December 20th, 1884, and an official register of physicians and midwives in Illinois revised to December 1, 1884. Springfield, Ills., 1884.

† DISEASES OF THE URINARY AND MALE SEXUAL Organs, by William T. Belfield, M. D. New York: William Wood & Company. 1884. Cloth, pp. 352. Being the October issue of the Wood Library of Medical Authors.

Brown's Manual of Clinical Methods.*

Too much study cannot be given to clinical methods. The indications of disease are ascertained by a variety of means. Each special sense furnishes its own peculiar result. None can really ever take the place of the other. The aids to the special senses by the various instruments in use are vast. But special training is called for to enable the eye to see, unaided, or by the ophthalmoscope, otoscope, laryngoscope, rhinoscope, endoscope, speculum, microscope, etc. So of each of the other senses. Chemistry and physiology still farther augment the capabilities of these senses to permit the brain to grasp the real phenomena of disease.

The work before us is an effort to assist the student in the acquisition of just this knowledge. Still farther, it aims to assist in the endeavor to group the varied phenomena of disease that they may be grasped as a whole.

Johnson's Medical Botany of North America.†

Medical botany as a part of the curriculum of medical colleges, has for many years been simply a dream. Most medical students know little of it or any botany, and usually care less. The author in his attempts to teach this subject found no text-book suited to the needs of his students, and hence he prepared this volume to supply this need. It first briefly treats of the life history of plants and their classification. Then it presents in systematic order the medicinal plants of North America. Of course he could not deal with them all, hence he has made the best selection he could. He has abundantly illustrated with wood cuts and colored plates the text. Altogether, the work is of interest to all who desire to gain a general idea of this subject.

*MEDICAL DIAGNOSIS; A MANUAL OF CLINICAL METHODS, by J. Graham Brown, M. D. Second Edition. Illustrated. Birmingham & Co. 1884. Cloth, pp. 285. Price, \$1.50 For sale by Phillips & Hunt, Detroit.

† A MANUAL OF THE MEDICAL BOTANY OF NORTH America, by Laurence Johnson, A. M., M. D. New York: William Wood & Company. 1884. The December issue of the Wood Library of Medical Authors. Cloth, pp. 292. Sold only by subscription.

Bryant's Manual of the Practice of Surgery.*

This work has ever been a popular one with surgeons and medical students. The appearance of a fourth edition within a short time shows that it has met the wants of the professional public. The present edition is printed directly from the author's notes. But he has incorporated much that was added by the editor of the former American edition, Dr. Roberts. In other ways he has recognized the additions to surgery by American surgeons.

The revision of the text has been thorough and complete. Hence the work has all the excellencies of the former editions plus the advances made since they were issued.

It is a beautiful book, a credit to author and publisher, and an ornament to the libraries that will contain it.

Wright's Lectures on Diseases of the Rectum.†

These lectures were first delivered to the students of the Medical Department of the New York University, and the stenographic notes of the same published in the *Medical Gazette*. To supply the demand for them after the files of the *Gazette* were exhausted, they were reprinted in book form. This brief account of the origin of this book will doubtless indicate to the careful student nearly the exact value of this book. That it is reasonable, that it mainly deals with general principles rather than details, that it has proved helpful to very many practitioners, is self-evident. Hence none will go astray in the purchase and reading of it. It is capital reading as to its style, as well as its contents.

Carter's Elements of Practical Medicine.‡

Three editions of this work have appeared in four years. The author's object was to provide the student with a general introduction to the study of medicine, and to meet the

*A MANUAL FOR THE PRACTICE OF SURGERY.—By Thomas Bryant, F. R. C. S. With 727 illustrations. Fourth edition, thoroughly revised. Philadelphia: Henry C. Lea's Son & Co. 1885. For sale by Phillips & Hunt, Detroit, Mich.

†LECTURES ON DISEASES OF THE RECTUM.—By Dr. J. Williston Wright, M. D., Professor of Surgery. New York: Bermingham & Co. 1884. Cloth, pp. 170. Price \$1.25.

‡ELEMENTS OF PRACTICAL MEDICINE, by Alfred H. Carter, M. D., London. Third edition. New York. D. Appleton & Co. 1885. Cloth, pp. 446. For sale by John MacFarlane, Detroit.

requirements of such as desire to have their knowledge condensed and made easy to acquire. This latter class of practitioners the author thinks have been too little regarded in the preparation of works on medical practice. Details of physical diagnosis are omitted for the reason that the author thinks these can only be studied to advantage at the bedside.

From this standpoint the work is a success, and certainly from a commercial standpoint it is a success.

Abstracts from Exchanges.

Prepared by A. B. Lyons, M. D., Walter P. Manton and W. B. Chittick.

Physiology.**A CORRELATION OF COLOR-PERCEPTION.—**

In the January number of *The American Journal of the Medical Sciences*, Dr. Charles A. Oliver elaborates a correlation theory of color-perception. He holds that color-perception takes place through each and every optic-nerve filament. It consists in the passive separation of a specific nerve energy equal to the exposed natural color, from a supposed "energy-equivalent" resident in the peripheral nerve tip, by an active chemico-vital process of the impinging natural color vibration upon the sensitized nerve terminal. The separated nerve energy is transmitted to the central terminus of the filament in the cerebral retina, where it is fully evolved into such a condition as to be transferred into an automatic form of perception by an action upon some unknown contiguous perceptive nerve elements: this constitutes the consummation of the nerve energy force into the lowest (and evanescent) form of recognizable color-perception. Finally, it is carried through similar posts and stations, though now of a higher value, as it was whilst pursuing its course inwards as a sensation, until at last it is completely recognized as intelligent color-perception in the higher color centres; these higher color cells being permanent in type, and forming parts and parcels of the higher perceptive cerebral centres. The first moment that the primary portion of this action (*i. e.*, the separation) has taken place, there has been left in the peripheral tip of the primarily impinged sensory filament a nerve-energy material equal to the difference between that individual nerve's "energy-equivalent" and the transmitted nerve stimulus. The healthy

peripheral nerve tip returns to its "energy-equivalent," or normal nerve power, the moment the specific energy separated by the received natural vibration has been forwarded for transmission and recognition; whilst the transmitting filament and excited cerebral expansion regain their normal condition the moment the energy has passed them. After the consummation of such an action, the filament is again ready for any other natural color-vibration.

WHERE IS THE CENTRAL ORGAN FOR SIGHT AND FOR HEARING?—Perhaps the best exposition in answer to this question is given by Luciani (*Brain*, July, 1884).

The centre of sight is affected by lesions of the frontal, parietal, temporal and occipital regions, as well as by destruction of the hippocampus major. Lasting visual derangements are only produced by lesions in the parietal to occipital region. Extirpation of one occipital lobe causes bilateral homonymus hemiopia, and hence each occipital lobe is in connection with the outer segment of the corresponding retina, and with the inner segment of the opposite one. He does not accept the projection of halves of the retina on definite segments of Munk's centre of sight because he says the bilateral extirpation of that region produces not partial but diffuse disturbances on sight and not cortical blindness. Luciani concludes the cortex is not the seat of visual sensation but images formed on the middle brain (corpora quadrigemina) are physically elaborated by the cortex.

The author connects the centre of hearing with the temporal, parietal and frontal lobes and with the hippocampus major, each ear being connected with both centres, but chiefly with that of the opposite side. Extirpation of the cortex of these regions leads to physical deafness.

Luciani found the centre of smell to be located in the gyrus hippocampi. There is a partial decussation of olfactory fibres, but the main bundle is confined to the same side.

He concludes that while each organ of sense has a special centre, yet there is common territory in the parietal lobe; and extirpation in this region leads, not only to considerable disturbances of sight, but also affects the sense of smell and hearing, as well as tactile sensations.

Anatomy.

THE LEVATOR ANI.—Mr. W. H. Cripps (*British Medical Journal*) gives an abstract

of the researches lately made by dissections shown at the Royal College of Surgeons and published in his work on the rectum. These show that former notions are essentially incorrect as far as the origin and insertion of the levator ani muscles are concerned. A large portion of the fibres arising from the inner portion of the symphysis pubis and from half an inch of the anterior portion of the white line do not pass directly downwards and backwards to be inserted on the sides of the coccyx. The upper half of the muscle is tendinous whilst the lower half, or that attached to the coccyx, is muscular. The posterior edge of the muscle forms a distinct and free border which crosses the rectum almost at a right angle; the point of bisection lies about an inch and a half or more from the anus, the true course of the fibres of this muscle is best seen by a dissection exposing its entire outer surface. The two levators would thus appear to act partly as compressors of the rectum, rather than as simple elevators of the anus and surrounding structures.

Neurology.

A CONTRIBUTION TO JACKSONIAN EPILEPSY AND THE SITUATION OF THE LEG CENTRE.—Dr. William Osler, of the University of Pennsylvania, records, in the January issue of *The American Journal of the Medical Sciences*, the history of an instructive case of Jacksonian epilepsy, the main points of difference between which and true epilepsy are, the slow onset, local in character, beginning in, or in mild attacks confined to, one limb or a single group of muscles; the gradual extension until the side is involved, or, in severe attacks, the entire body; loss of consciousness late, not early and sudden, as in true epilepsy; and, lastly, the muscular contractions are clonic.

His case lasted over fourteen years, the convulsions beginning in the left hand, at first monobrachial, then extending to the leg, afterwards becoming unilateral, and finally general; at first without loss of consciousness. For the first nine years of the illness, there were remarkable intermissions, lasting for six or seven months, once an entire year. Six years after the onset the left leg got weak and stiff. For four years, the tenth, eleventh, twelfth and thirteenth of the illness, the seizures were frequent. During this period there were six weeks of unconsciousness in which the spasms were very frequent, fifty to eighty in the day. Ten months prior to the

final attacks there was freedom from convulsions. The intellectual faculties were unimpaired.

The case is unusual in the limitation of the lesion to the ascending frontal convolution and to its fasciculus of white matter, scarcely involving the gray substance which is commonly affected in cortical epilepsy. The accurate localization and the remarkable absence of tissue changes in the immediate vicinity give the case the nature of an exact physiological experiment. With this limited lesion of the motor area there was permanent paralysis with contracture of one extremity and epileptiform convulsions. Another feature of interest is the light it throws on the situation of the leg centre. The fibrous mass was situated entirely within the anterior part of the paracentral lobule, limited in extent, confined chiefly to the medullary fibres of the superior frontal fasciculus, and only touched the gray matter in places. A point to be referred to is the absence of the paralysis of the leg for the first six years, for, if the convulsions and monoplegia were caused by the same lesion, how explain the late onset of the latter? From the fibroid state of the tumor it might reasonably be inferred that it was originally larger and had shrunk, but the absence of puckering on the surface and the way in which the margins merged with the contiguous parts make it probable that the growth was always small, so small in fact that at one period of its development it may have caused sufficient irritation to induce the convulsions, and yet at the same time not involve the special fasciculi of white fibres to the extent of producing weakness of the leg, or monoplegia.

INTERMEDIATE HOSPITALS FOR THE TREATMENT OF ACUTE MENTAL DISEASES.—

The nervous system has of late years claimed the attention and study of the best medical minds of all countries, and it is now an evidence of a still further progress in this direction, that mental diseases are no longer allowed to remain in the hands of asylum-superintendents, but are beginning to demand the care and investigation that they undoubtedly deserve from a larger and more active class of specialists. It is by the medium of this development that Dr. John VanBibber, of Baltimore, has been led at various periods, during the past five years, to investigate the plan of treatment and the management of insane asylums, both in this country and in Europe, the results of which are given in a

most interesting paper in the January number of *The American Journal of the Medical Sciences*.

It is a curious tradition, which is blindly accepted by most people, that insanity differs entirely from any other form of disease, that it must be removed from sight, and, if possible, from remembrance, and treated only by medical men who live within the walls of an asylum, and devote their lives to the care of this class of patients. No less is it a matter of general belief that the institutions in which this malady is treated are not hospitals, but asylums, that their use and purpose, though known, are in some way mysterious, and that their existence stands outside and apart from the ordinary ministrations of men.

This uncanny reputation is clearly the result of prejudice, and to some extent the result of the present system of treating and caring for a most unfortunate class of sufferers. It is the remnant of that feeling which, years ago, built prisons for the safe-keeping of lunatics, and which employed chains and manacles in the treatment of their disease. We have developed safely beyond the dark period, and, with rare exceptions, we have even passed the epoch of restraint.

But there are other changes which are as necessary and imperative to secure the better and more successful treatment of cases of acute insanity. These changes must affect many of the characteristic arrangements of insane asylums, the medical officer in his double rôle of physician and superintendent, and the crowding of large asylums with acute and chronic cases. This reform must also bring about the establishment of intermediate hospitals for the treatment of acute cases, and the gradual development of large asylums into homes for incurables and chronic cases.

These points Dr. Van Bibber ably discusses separately and in detail, and he comes to the conclusion that many of the evils to be complained of in our asylum system arise from the unwise association of the curable with chronic cases, and the remedy is to be found in the establishment of the intermediate hospital which is to stand between acute insanity and the asylum. This is the hospital which is to develop the ambition of the specialist, which is to enlarge his horizon, and to bring him out of an asylum into the active world of thought and progress. This is the hospital which is to teach the treatment of insanity as it has not yet been taught, and to educate,

under active clinical instruction, the men who are to be the guardians and prompters of a most important reform. The possibility of making a hospital and a school out of what has been heretofore an asylum without educational power, or without the means of using valuable clinical material, is a proud future to look forward to. It means much to the profession. It is of deep significance to the public. It means an assurance that patients confided to the care of the intermediate hospital are to have every advantage of active treatment and good nursing. It means a course of treatment which will divert and distract the patients as much as possible from their sufferings, forcing them by activity to brood as little as possible over the dreary melancholy of their disease. It means the exclusion of every factor that can militate against the recovery of a patient, and the least possible detention after recovery.

DOUBLE INFANTILE SPASTIC HEMIPLEGIA.—In the January number of *The American Journal of the Medical Sciences*, Dr. S. J. McNutt reports a case of double infantile spastic hemiplegia, with carefully recorded notes of the post-mortem appearances, illustrated with seven cuts exhibiting the lesions found. This is believed to be the third, or, at the most, the fourth case of its kind upon record. Yet these cases do not appear to be so very uncommon, since four others presenting similar symptoms are known to be now in New York City. As a distinct condition, even simple infantile spastic hemiplegia has but lately received attention in text-books. For this reason, on account of the difficulty of obtaining any comprehensive information on the subject, the collection of facts and theories presented in Dr. McNutt's paper is of great value, and must lead to a further study of this interesting condition. Dr. McNutt has collected and tabulated 34 cases in which autopsies have been made, and each of them presented atrophy of the cerebral cortex, near the fissure of Rolando.

The subjects of infantile spastic hemiplegia may live to an old age. The inception of the disease, however, always dates back to early childhood, or to intra-uterine life. At whatever age seen, its victims are characterized by more or less complete hemiplegic motor inability, atrophy, and contractures, with or without aphasia, monosyllable utterance, dysphagia, dyspnoea, and idiocy, the latter being especially characteristic of the double affection.

The etiology of infantile spastic hemiplegia has been defined as primitive defect, arrest, encephalitis, and hæmorrhage.

Clinically, these cases may be divided into three classes: those in which the inception of the condition precedes birth, those in which it occurs after birth, and those of which parturition is the cause. The paper concludes with a careful study of the differential diagnosis and treatment.

INTROSPECTIVE INSANITY.—Among those vague conditions of mental weakness in which there is slight derangement of the intellectual powers, yet a decidedly marked enfeeblement of the will, and an excitement of the emotions of a more or less limited kind, we find a variety of interesting psychoses which have, within a comparatively recent period, been considered under the names *folie du doute* or *grübeln*. And in an interesting clinical paper in *The American Journal of the Medical Sciences* for January, Dr. Allan McLane Hamilton treats them under the title of "introspective insanity." In the cases Dr. Hamilton relates there was a history of insanity, and the nervous temperament was manifested by various peculiarities, more often by a species of hypochondriasis, by peculiarities of temper, and by acts of eccentricity which caused the subjects to be looked upon as "queer." These terms are applied to the condition of mind which is manifested by a morbid feeling of doubt and consequent indecision under the most ordinary circumstances, when both the doubt and indecision are unreasonable in the extreme, but the individual under the mandate of an imperative conception yields more or less to his disordered emotions. Some years ago we would speak of this condition of mind as "hysteria," or, if it influenced the patient's conduct to any remarkable degree, we would be at a loss for a proper explanation.

Diseases of Children.

COHEN ON TRACHEOTOMY IN CROUP.—In the *Med. and Surg. Reporter*, Nov. 29th, '84, Dr. J. S. Cohen presents some interesting considerations on this subject. From a collection of five thousand cases he has shown that the proportion of successful operations is one in four. The ratio of success is often greater in one's earlier than in his later cases. Thus the late Dr. Hodge at one time reported four cases, three of which recovered; later he operated seven times without another

recovery. Dr. Jacobi, whose success at one time had been exceptionally good, said that afterwards he had been so unfortunate as to lose one hundred cases in succession. He thinks that the occasion of this difference is that the first cases are better nursed than the later ones.

The best time to operate is as soon as the thought of the necessity for the operation comes into the mind. Success depends upon an early operation, other things being equal. He thinks it dangerous to dispense with a tracheotomy tube.

Steam in the room, and the maintenance of an equable temperature are important. If he had to depend upon two things in treating croup he would choose vapors from slacking lime. But he would want large pieces of lime and lots of water, and these constantly renewed. He thinks the action of the lime is mechanical. Particles of the lime are carried in the air and deposited under portions of the loosened membrane. This acts as a wedge to keep the membrane from the raw surface, this open space admits of the steam constantly coming in contact with the diseased surface, and still farther detaching the membrane. He thinks he has seen life saved more frequently by this lime treatment than by tracheotomy. In operating for tracheotomy he opens the trachea below the thyroid gland.

Gynecology.

THE TREATMENT OF INTRA-UTERINE DISEASES.—Dr. Lombe Atthill (*Brit. Med. Journal*, November 20, 1884) presents an able paper on this subject, and sums up his views and experiments thus:

1. Carbolic acid, in the proportion of one part of spirit to two parts of the acid, is the safest and most generally useful of all the agents employed.

2. Carbolic acid should always be applied by means of a probe, round the point of which a layer of cotton is rolled, the cotton being carried up to the fundus of the uterus at least twice on each occasion that the applications are made, which should be on every third or fourth day till marked improvement takes place.

3. Carbolic acid should never be injected into the uterus, except when combined with iodine, in the form known as iodised phenol.

4. In many cases, iodised phenol may with advantage be applied by means of a probe.

5. In cases in which metrorrhagia or profuse menstruation occurs depending on an

unhealthy condition of the intra-uterine mucous membrane, the cavity being dilated and the uterus enlarged, from half a drachm to a drachm of iodised phenol may be injected with great advantage.

6. In cases in which epithelioma attacks the mucous membrane of the cavity, the injection of iodised phenol promises better results than any other treatment.

7. The success likely to follow the injection of iodised phenol, renders the dilation of the uterus, the use of the curette and the subsequent application of fuming nitric acid less frequently necessary than has been the case hitherto.

8. The injection of iodised phenol requires to be carried out with so much care, that it should never be injected except by means of a syringe which will not contain more than a drachm.

9. The use of the fuming nitric acid should be limited, as a rule to those cases in which dilatation has been practiced, and it should always be carried on through a tube, inserted into the cervix uteri for the purpose of protecting the sides of that canal from the action of the acid.

10. The pain produced by the application of any medical agent to the intra-uterine cavity does not bear any relation to the activity of the agent, but is due to one of two causes—either to hyperæsthesia or to a narrowness of the cervical canal, especially of the os internum.

Obstetrics.

VOMITING IN PREGNANCY.—Dr. W. G. Wylie (*Med. Record*, Dec. 6th, 1884) in an excellent paper dwells upon the following points:

1. Nausea and vomiting in pregnancy should not be considered and treated as merely one of the symptoms of pregnancy, but, as a rule, as indicating an abnormal condition of the tissues of the cervix due to imperfect development, disease, or the effect of disease on the tissues of the cervix.

2. Any pathological state which interferes with the softening and other changes which the cervix undergoes during pregnancy may cause vomiting.

3. In most cases relief is obtained by freely dilating the cervix uteri below the os internum, and in many instances it is the only means by which relief can be had. It is true that inducing abortion will give relief, but to accomplish this the cervix must be dilated.

4. In many cases specific medicines given by the mouth are useless, and as a rule should not be used till a local examination is made and the indications for local treatment ascertained.

THE ETIOLOGY AND PREVENTION OF PUERPERAL ECLAMPSIA.—Dr. H. B. Fry (*Amer. Jour. Obstet.* Jan., 1885) concludes an elaborate review of this entire subject with the following:

1. Puerperal albuminuria is the symptom of a pathological change or of pathological changes, indicative of a predisposition to eclampsia.

2. The prophylactic treatment of eclampsia, therefore, includes measures adapted to prevent the occurrence of albuminuria. These are to improve the blood by the administration of tonics, iron, and a liberal dietary; and to relieve the renal congestion by attention to the functions of the skin and by prohibiting the wearing of tight clothing.

3. The urine in all pregnant women should be examined for albumen after the fifth month of pregnancy, and earlier if any suspicions are entertained of renal complication.

4. With the recognition of the disease, treatment should be directed to its cure. This is divided into general, dietetic and medicinal, and

5. Obstetrical, to which are referred the graver cases of the affection. These, not having yielded to treatment, by the urgency of their symptoms, demand prompt operative interference.

ERYSIPELAS AS A COMPLICATION OF PREGNANCY AND LABOR.—In *The American Journal of Medical Sciences* for January, Dr. G. H. Balleray records two cases of labor with concurrent erysipelas without untoward result. He points out that the management of labor in the case of a woman suffering from erysipelas does not materially differ, other things being equal, from the management of a case of normal labor. The accoucheur, should abstain from frequent vaginal examinations during labor; and such examinations as are necessary should be made with clean hands. The placenta should, if possible, be delivered by Credé's method; thus avoiding the introduction of the finger or hand within the genital canal. A full dose of ergot should be given after the delivery of the placenta; and the uterus should be gently manipulated until it is firmly contracted. In the after-treatment, the nurse should be forbidden to touch the genitals of the patient,

without having previously washed her hands thoroughly with hot water and soap. The use of antiseptic vaginal injections should be commenced within twelve hours after delivery, and continued as long as there is any indication for their employment.

Diseases of the Heart.

RETARDATION OF THE PULSE IN MITRAL INSUFFICIENCY.—Dr. A. T. Keyt (*Journal of the American Medical Association*, December 20, 1884) concludes an original study of this subject thus:

1. Abnormal retardation of the arterial pulse, notably the carotid on the systole of the ventricle is a real phenomenon of mitral insufficiency.

2. It is present in all cases of pure, harmful, mitral insufficiency, and is absent in only insignificant, harmless regurgitation, or in regurgitation complicated with aortic insufficiency.

3. It measures by the amount of retardation the amount of regurgitation.

4. It may be present in two other conditions, probably a third, all organic; hence this sign, notwithstanding its positive value, is not of itself pathognomonic.

5. In conjunction with apex systolic murmur, its presence is conclusive of mitral insufficiency.

6. Compared with apex systolic murmur, this sign is more positive and appreciative, and distinguishes, which the latter does not, between harmful regurgitation and harmless conditions.

7. By the aid of this sign a positive diagnosis may be at once made in any case, and without waiting for the development of sequences and symptoms.

Bismuth Test for Sugar.

Nylander (*Zeitsch. für Physiologische Chemie*) recommends as a reagent for the detection of sugar in the urine, a solution containing 2 grammes of bismuth sub-nitrate, and 4 grammes of rochelle salt in 100 grammes of an 8-per-cent. solution of caustic soda (Na, O). The urine to be tested must be free from albumen. It is advisable, sometimes, to prepare the specimen for the test by precipitating the earthly phosphates by the addition of a few drops of liq. potassæ, and filtering, although in most cases this is not necessary. The presence of sugar is shown by the development of a black or grayish tint on boiling after the addition of this reagent.

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A Review of Hystero-Epilepsy and Hysteria.

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DISEASES and their treatment have been so thoroughly investigated and studied by able minds, that when our attention is called to some new literature on a given medical subject, as a rule, we expect little if any more of value than has already been written. Therefore, the case at present under my observation has prompted me, by way of study, to give this paper the title of "A Review," as above stated. The case is of interest to the physician, theoretically and practically; diagnosis is not always easy, the prognosis is uncertain, the pathology mysterious and almost unsearchable, the treatment unsatisfactory in many cases, and the peculiar symptoms or phenomena are the most that can be known. Hence, when we get a combination of symptoms such as shall be given further on, we name them hystero-epilepsy, or hysteria.

The former is a term applied to a form of hysteria of unusual gravity, the convulsions in their violence recalling those of epilepsy, and characterized by the occurrence of remarkable forms of anæsthesia, paralysis, and contraction of muscles. There is usually, in the first place, a well marked tetaniform spasm, though this is sometimes not very decided, and occasionally is not marked at all; then follow clonic convulsions, during which the patient froths at the mouth, and may pass the urine or bite the tongue, though these phenomena, especially the latter, are rare; loss of consciousness exists during this stage. Relaxation of the muscles, and a more or less comatose condition, succeed, to be followed shortly, however, by contortions and gesticulations of a violent character, coarsely suggestive of the various passions, wrath, fear, disgust, lust, etc., or there may be meaningless writhings, presenting a hideous aspect. To this phase sometimes succeed hallucina-

tions of vision or of hearing—rats, serpents, and other objects of horror are seen; then follow attacks of sobs and hysterical laughter. There may remain a temporary inability to empty the bladder or swallow food. One or more muscles of the body or limbs may remain indefinitely in a state of rigid contraction or relaxation, and remain so during sleep, only relaxing under the profound influence of an anæsthetic. Intestinal gas may be imprisoned between two points of spasmodic contraction of the intestine, giving origin to a tumor capable of being moved about in the abdominal cavity; this may be mistaken for a tumor of the spleen, kidney or other organ. A similar case of tumor was recently related to me, where the patient was put on the table for operation, the tumor disappearing entirely as soon as the patient was anæsthetized. Dr. Hartshorn also speaks of a patient who had been laid out by a surgeon for exploratory gastrotomy, under the supposition that she had an ovarian tumor, and when she was etherized the tumor altogether disappeared. Anæsthesia and analgesia are apt sometimes to be found on both sides, but much more frequently in one-half of the patient's body, parted off from the other by the median line, and thus involving apparently half the head, face and trunk, as well as the lower and upper extremities, though it may be in different degrees of intensity. Accompanying the analgesia, it is often seen that the pin-prick employed to test the condition fails to draw blood on the affected side, whilst readily doing so on the opposite side. Where there is loss of power of the limbs, with contracture and anæsthesia following a convulsive attack, it is not difficult for the condition to be ascribed to an attack of hemiplegia resulting from organic disease, and there is sometimes a doubt in this matter which is not easily resolved.

One point of value in making a differential diagnosis, is the absence, from the first, of any deviation of the tongue, or facial paralysis, which are always present, to a greater or less extent, in hemiplegia of organic origin. Such complete anæsthesia as

*Read before the Barry and Eaton County Medical Society, at Charlotte, Mich., Jan. 29, 1885.

occurs in these cases is rarely observed in hemiplegia. The hysterical patient may present, for example, retention of urine, ovarian tenderness and tympanites, and more or less disturbance of the digestive organs. In the history of the case may be an account of aphonia, convulsive seizures, hysterical cough, etc. Some diagnose a case of hysteria by a certain combination of symptoms, and add to these epileptiform convulsions, and call it a case of hystero-epilepsy.

Still we are in the dark as to the cause, and as to what the disease really is, and its location. One writer says it is "a morbid excitability of the whole nervous system." Another says he "believes it always to depend on disorders of the blood." Others say, "it depends on uterine disorders" (of course in the female, but when a male is attacked it must depend at least on other organ or organs than a uterus.) Emmet says, "it is intimately associated, as a rule, with menstrual disorder; further, that these nervous manifestations are generally found in the unmarried and sterile, and at puberty, before the system has become impressed with the menstrual habit; they also occur with the state of amenorrhœa or suppression, scanty and painful menstruation, and at the change of life or menopause. These conditions are associated, more or less, with a general impaired nutrition and defective ovarian influence."

Another writer says, "it is a psychical affection; involving mental causes, *e. g.*, congenital tendency, heredity, faulty education, defective discipline and imitation, and dependent also on physical disorders."

Another author believes "the predisposing causes to be imperfect development of the higher nerve centers of congenital origin. The disorder is only exceptionally found in women suffering from diseases of the genital organs, and further makes exceptions of prostitutes, who are prone to the disorder, and like true epilepsy, migraine, and some forms of insanity, the disorder is apt to be intensified at the catamenial period." Lastly, we have suggested as some determinative causes, painful impressions, long fasting, strong emotions, imitation, and shock to the nervous system, physiological or moral. Emmett after saying, "as a rule, the disease is closely or intimately associated with some menstrual disorder," then goes on to say, "ovarian irritation or defective action of the ovaries, and the different nervous manifestations all spring from defective action in the nerve cen-

ters," the result of faulty nutrition. How are we to understand him as to what is the cause or pathology, in his opinion, of the disease in question? We might read him in this way: that faulty nutrition is the cause of defective action in the nerve centres, and defective action in the nerve centres, in turn, causes ovarian irritation, and ovarian irritation, if not the cause of, is intimately associated with the disease hysteria.

From the history of cases and the weight of authority, it is not at all probable that disease of the genital organs plays the part of being the cause of hysteria, half so frequently as many other circumstances and conditions of the general system.

Cases that have come under my own observation, were persons whose health was impaired more or less in some way, and were of emotional and nervous temperament, and of delicate organization, unhappy and discontented dispositions. In the words of Hammond, "hysteria is the result of the delicacy of organization, and the greater development of the emotional system, acted upon by exciting causes." Want of occupation, hereditary influences, etc., are also predisposing causes of hysteria. Exciting causes are sudden emotional disturbance; anxiety, grief, disappointment, a fit of ill-temper, as I have observed repeatedly in one case, mental or physical fatigue, also menstrual derangement, uterine or ovarian disorders, may rank as exciting causes, as may many other factors that I have not mentioned and are not noted by authors.

Like some forms of uterine diseases, hysteria may become contagious. Hammond says he has seen a whole hospital ward of women thrown into paroxysms of hysteria, by one patient suffering from an attack.

Morbid anatomy contributes nothing toward locating this disease. That there is a predominance of the emotions over the intellect and especially over the will, there is little doubt. Thus, I was called to see a lady of very delicate health, having one hepatized lung of several year's standing, also having acquired the morphine habit, greatly emaciated, etc. Soon after the death of her husband, perhaps she spent an hour in wailing and in bitter cries of grief, at once fell into an unconscious, comatose condition from which she could not be aroused for half an hour, more or less, then she aroused with a deep sigh and burst into a fit of laughter and began to shake hands with those around her, and for ten or fifteen minutes she would have

alternating fits of laughter and sobbing, which were only arrested by awaking her to her condition by taking her to where she could be convinced that her husband was dead, by looking at his dead body.

CASE 2.—Mrs. S., æt. about 33, living with her second husband, who, by speculating, was rapidly running through with or losing a considerable amount of property, which was all their main dependence for a livelihood. She was a frail built, emotional, very excitable woman. After considerable endurance of being dragged from one farm to another by her husband's bad speculative projects, and as she saw that their property was thus being squandered, the husband at last traded their farm for a hotel in a village, under the wife's most bitter protest; and more, her pride was greatly humiliated by thus becoming the wife of a saloon or bar-tender, which she utterly abhorred. Soon things were in operation, and they were keeping hotel, selling intoxicating drinks, giving public balls, etc. Soon I was called, and found the woman in a violent convulsion; opisthotonos was very marked, resting only on the head and heels, with the body extremely arched. This was followed, after a few minutes, by a clonic spasm, which I succeeded in interrupting by firm pressure over the ovaries. The spasm ceasing, was followed by fits of laughter and sobbing, alternately, not having been restored to her former self. In a few weeks more another ball was prepared for; the company gathered, the dance was going on, the bar-room was noisy with drunken men, the wife trying to oversee the preparing of the supper, when at once she was thrown into tetaniform spasms as before. Douching with cold water and pressure over the ovaries partially arrested the convulsions, but she deliriously begged her husband to take her from the hotel, and said, among many other things that he did not succeed in restraining her from, that he would have the sin to answer for, that he compelled her to come there against her will, etc. Soon they moved into a private house in the village, and for a year or more thereafter, while under my observation, no more fits of hysteria were manifested. The mother of this woman was subject to similar hysterical attacks, and always had the appearance of being very nervous and emotional.

CASE 3, now under my care, I have not had an opportunity to see during the hysterical fits, consequently the history of the case I

have gathered from the patient and relatives.

Mrs. A., æt. 22, married at 17, is a lady of slender build, pale and anæmic, wears a troubled and careworn look. She was always considered a delicate child, and before the age of puberty, contracted chicken-pox, mumps, measles and scarlet fever. She was first attacked with hystero-epilepsy at the age of 14, commencing with a distinct aura. After having been sweeping late in forenoon, while dusting a sewing machine, a sharp, sudden pain started in the little finger of her left hand. She thought she must have hurt her finger on or about the machine. The pain crept steadily up the arm toward the head. Not remembering anything after it reached high as the shoulders, she stood motionless for an instant, calling, as she thought, for water, and gazing with a wild stare at the wall in front of her, then fell to the floor, or rather sank, as she never injured herself by falling. Before falling she becomes perfectly bewildered, and only sees one-half of any object before her eyes. She lay now in a tetanic convulsion for a time, then the muscles would relax and for half an hour or more would remain in a coma, face pale, lips and finger-nails livid. Then clonic spasm of left side would follow for a short time, after which she would become conscious, but would have no feeling in the left half of her body, including lower and upper extremities, half of trunk and face. She now could see only one-half of any person or object before her eyes, could not raise the left eyelid, could move her left arm and limb, but they would move in an opposite direction to her will; and in trying to ask for a drink of water, would say butter, bread, or something contrary to what she wanted to say, and at the same time would be cognizant of her mistaken speeches. This condition would remain from two to twelve hours, when she would complain of a severe pain in the top of her head, look wild and frightened by any noise, would have hallucinations of seeing horrid looking faces coming up behind her to her left side; would see a large pinch-bug off from her left side. Lastly, the attack ends with crying and sobbing, followed by a deep sleep lasting for twenty-four hours or more, from which she is awakened with difficulty. A peculiar form of conjunctivitis of the left eye followed the first attack and has been more or less aggravated by each succeeding attack, and is not cured by the ordinary modes of treatment. The frequency of these convulsive

seizures have varied from a few weeks to one or two years, constipation is habitual, menstruation tardy and scant, appetite irregular, continual pain and tenderness in the epigastric region, some tenderness over the left ovary during menstruating period, heart sounds normal, has a habitual nervous cough, physical examination of lungs gives negative results, has given birth to four premature children at the sixth and eighth months of pregnancy, convulsive seizures always come on when patient is hungry, and after some mental worry; she talks of her blighted high expectations in life, etc., and manifests a great inclination to mind-worry.

The real cause and pathology in this case is obscure as it is in most of like cases. That the condition of the mind is the prime factor as the exciting cause in this class of disorders, I have little doubt, but let us look a little further into the hereditary tendency in this case.

The mother being subject to similar attacks, gives the history of two, one while traveling a long tedious journey in a wagon, another while engaged at household duties, a week before giving birth to a child. The same hemiplegic ataxic phenomena of the left side and accompanying hemiopia as was manifest with the daughter were exemplified in the case of the mother, but the resulting unilateral conjunctivitis that remains so prominent in the former case is wanting in the latter.

An aunt of the mother, now upwards of 60 years of age, was subject to similar hysteria from the time she was ten years old, at which time she lost an eye by accident, and has had since, during all these long years, variable pain in the head. She moved from Michigan and has lived in Kansas for the last five years, and the change of climate has seemed to greatly ameliorate the varied symptoms of the accursed disease.

Herein are the fulfillment of the scriptures verified: "The sins of the fathers are visited upon the children, even unto the third and fourth generations." We have now given an abbreviated history of three special cases. The first and second may be called hysteria, the latter hystero-epilepsy.

In the first two the exciting cause undoubtedly is the reasoning and will power being entirely dethroned by emotion, and I have but little doubt, could a more perfect history of the latter case be had, the exciting cause would be similar to the former ones.

The mind is overpowered, and the great nerve centre, which is the harbor for its ex-

istence, is thrown out of gear, and one link after another in quick succession of the incomprehensible chain of the whole psychical system is deprived of its coördinating power, thence comes the horrid phenomena as described above. That the mind has a powerful influence over matter, physicians agree. Just the condition the brain and spinal cord are thrown into during hysteria we can only conjecture; the circulation of blood in the brain is undoubtedly interfered with; the vaso-motor system fails to play its part, nerves are electrified and muscles convulsed, until the propelling power is exhausted, or equilibrium is re-established.

Does any special disease have a tendency to cause hysteria? As to diseases of the genital organs being a cause, I do not believe. It is a disease of the married and the unmarried, of the young and the old, the sterile and the child-bearing women; moreover, it is a disease that attacks either male or female. We do not have a proportional number of cases, or in other words we see so few cases of hysteria compared with the throng of women who are daily visiting the gynecologist. We can not attribute the disease to the system being below par, from any special disease of the whole or part of the body. How much has nutrition got to do with it? Comparatively few of the great mass of ill-nourished contract the malady.

Where shall we locate the disease? Theologians might say, "such a case is possessed of seven devils," but the devils are in the mind. It is a disease of the mind, latent or manifest. The mind is impressed with outside influences, and the material organization is only set on fire by the mental, and both of these are influenced more or less by heredity, faulty education, imitation, environments and circumstances in life. Laughter is produced by outside influences on the mind, likewise is anger, emotion, etc. Excite these beyond the endurance of the will and the equilibrium is lost and the whole or part of the human machinery no longer works in unison.

The treatment of the hysteria and also the epileptiform phase of the disease, must vary somewhat according to circumstances, and the general health, physically and mentally. We hardly expect to improve the qualities of the mind with an ill-nourished brain, and the latter must be remedied by getting proper work from the digestive organs. This may be accomplished by regulating the diet, the bowels, the exercise, and the sleep of the patient, assisted by medicines. Good substan-

tial food and proper exercise, that will at the same time occupy the mind without worry, that will rather be cheerful and invigorating, are paramount necessities. Hysterical patients should be kept away from hysterical company, and over-sympathizing friends, who are apt to direct the patient's mind to her own unfortunate condition. It requires a great deal of tact and good judgement on the part of the physician to manage well each separate case. Decided mental impressions that will induce the patient to self-control, should always be exercised. "If medicine were in a position to regulate the mode of life, food, education, and especially the selection for the propagation of the species, it is very probable that in succeeding generations hysteria would become more and more rare in the race."

Individual cases we can only treat on an expectant plan, and most that can be hoped for is to relieve and lessen the weight of each paroxysm and lessen their frequency and treat more or less successfully intercurrent and accompanying diseases. Paroxysms or spasms may be cut short by douching with cold water on the face; pressure over one or both ovaries. I have seen cases that seemed to be in great distress and in spasms to the great horror and anxiety of friends and lookers on, quickly and suddenly changed into a tranquil and hearty laugh, to the great relief of all concerned.

The time-tried valerian, assafoetida, the bromides, mono-bromated camphor and opium have not as yet been supplanted as remedies for acute attacks of the disorder. Cases have come under my care who dared not trust themselves without a supply of valerian on hand. To assist the patient best to control herself in keeping at bay the horrible paroxysms is to build up the general health; the use of tonics, quinine, iron, pepsin, laxatives, strichnine, etc., as each individual case may require. But general changes of habit, and tranquil, even engrossing, occupation of mind and body, are more to be relied on than medicine. But hysteria once established is apt to do injury to the organism, that is slow of repair if at all, and the power of resistance is weakened and attacks are apt to be repeated. Then our efforts are to be directed to paving a way of escape for coming generations. One of the most difficult lessons to impress on many minds is the power and extent of individual and hereditary influence; and parents more than others, resist the belief that their children are, to a great extent,

exactly what they make them: the great law of like producing like. Men and women assuming the great responsibility of parents, should be especially qualified as educators. As long as we leave the greatest event of life to chance, we will continue to have as a result, the blind, the deaf and the dumb; the idiot, the lunatic, and the hysteric; the epileptic, the criminal and the drunkard; and thousands of human beings that never should have been born: a tax on society, a disgrace to their parents, and a curse to themselves.

The Löwenthal Theory of Menstruation.*

BY J. H. CARSTENS, M. D.†

IT HAS generally been considered that menstruation was brought about by the rupture of a Graafian follicle, or *vice versa*. These, or some deviation from these theories, have been accepted by most writers in all countries. Lately, Beigel‡ has claimed that ovulation continued uninterruptedly at all times and was independent of menstruation, and the latter would, if anything, assist the rupture of the Graafian follicles, but that the latter would have no influence on menstruation. These theories and modifications of theories prove that our knowledge of the wonderful physiological process of menstruation and ovulation is still imperfect, that we have little knowledge on the question—it is really all theory.

Lately, Löwenthal§ has brought forth entirely new views, and has substantiated them with such an array of plausible arguments that we might well consider them. I have, therefore, made a free translation, and in this paper only can touch on a few of the principal points made. He starts out with what are accepted as facts by all medical men, viz.:

1. Menstruation recurs periodically. It is marked by an individual periodicity. Any deviation from the ordinary rhythm (due to strong psychical influences, changes of the mode of life, etc.) will, in a short time after removal of the cause, return to the special normal periodicity.

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‡ *Path. Anat. d. weibliche Unfruchtbarkeit*.

§ *Archiv Gynækologie*, Band. 24, 1884.

2. The kind and duration of the flow is different in different women.

3. Anatomical and physiological changes take place in the mucous membrane of the uterus:

(a) That is, a thickening of the mucous membrane, which commences about ten days before the menstruation, and is analogous to decidual formation in the early stages of pregnancy.

(b) During the flow disintegration of the outer layer of the mucous membrane takes place, which is completed in ten days.

(c) The swelling of the mucous membrane at first takes place especially in the outer layer, and affects the lymph vessels which are dilated, and not the blood vessels; the latter only enlarge at a later period, that is, just before the flow commences. *Congestion does not cause the thickening of the mucous membrane.*

(d) The increase in the thickness of the mucous membrane is confined to the body of the uterus; the cervix is not involved.

(e) The other sexual organs, and the system in general, are influenced, more or less, by the menstrual process. The ovaries (one or the other) increase in size, due to a ripe Graafian follicle ready to burst. This does not take place during the time that the membrane swells, but at the time of the flow of blood.

During the menstrual process we have first infiltration and swelling for ten days, then hæmorrhage for four to five days, and finally return of the normal, *restitutio ad integrum*, for four to five days, the whole process occupying about twenty days. The infiltration and swelling must, under all circumstances, be looked upon as the primary impulse, as the flow of blood can only take place after the former has existed for some time.

As the different theories do not explain the many phenomena of menstruation, especially the two factors: that the congestion and hæmorrhage cause the rupture of a Graafian follicle, or the latter causes the hæmorrhage, we must hence conclude that a third factor plays an important part, and that this third factor is the product of ovulation, the unimpregnated ovule.

The whole menstrual process might be considered as follows:

1. The Graafian follicle ruptures and the ovule passes down into the uterus.

2. In the first appropriate fold of the uterine mucous membrane (generally near the mouth of the tube), the ovule is imbedded,

and causes by its presence a swelling of the mucous membrane: that is the menstrual decidua.

3. If the ovule becomes impregnated the menstrual decidua is developed into the true decidua of pregnancy.

4. If in a certain time, which represents its vitality, the ovule is not impregnated, it dies and thus causes congestion and disintegration of the menstrual decidua, that is the menstrual flow.

5. The congestion reacts on the cause of its origin, the ovaries, and brings about a rupture of a follicle which in the meantime has ripened. (This does not exclude any other cause which might bring about menstrual congestion, as a cause of a ruptured follicle.)

This view not only explains all contradiction, but also solves many doubtful questions in a satisfactory manner.

The basis of this view is:

1. That the unimpregnated ovule becomes imbedded.

2. That after this imbedding (and only then) it has a certain limited individual life power.

Many objections might be urged against this theory. Some authorities claim that impregnation always takes place at the ovary and that extra-uterine pregnancy tends to prove this, but as extra-uterine pregnancy occurs once in ten thousand cases, the chances are ten thousand times greater that impregnation does take place in the uterus. Gerbe-Coste have claimed that the ovules of a rabbit are covered with an albuminous layer as soon as it leaves the fallopian tubes and that this layer prevents the passage through it of spermatozoa, consequently impregnation can take place only in the tubes. This layer may disappear later, however, as we know that nature, instead of preventing impregnation by such means, always furnishes aids to facilitate impregnation. Nor can we assume that a human being can be compared to the lower animals, but that a fundamental difference exists. The lower animals have one or two rutting seasons a year, and their power to multiply is limited to this time. The human species is always ready to impregnate or become impregnated. The rutting season of animals depends on the duration of pregnancy in every species, and is always at such a time that the birth of the young takes place when there is an abundance of food. With man this is not necessary. He is independent of seasons. Male and female animals are in heat at the same time, the ovule and the

spermatozoa are supplied at the same time; no social obstacles exist; the female, ready for impregnation, is impregnated at the time. In the human species man certainly has no period of heat, and the ripe ovule is not brought immediately in contact with spermatozoa—if the power to propagate the species is not to be reduced to a minimum it is necessary that one or the other components of reproduction must have a longer life power, so that impregnation can take place at any time.

The female element has the undoubted advantage as it furnishes the egg, the material to build up an embryo, while the semen is only a secondary factor, which merely starts the development of the ovule. Everything tends to prove that the ovule which is not immediately impregnated, must have an equal, if not a longer life power than the semen which is deposited in the genital parts. The two components of the future embryo not being present at the same time, and impregnation being possible at all times, it follows that *one must wait for the other*. The ovule being the larger, and placed on a soil which it needs for its future growth, is therefore probably the component part which waits for the other, as the spermatozoa are soon destroyed when removed from the spermatocanal. If the ovule has to wait for the spermatozoa, it can only do so in the uterus, as it is forced there, not having power to move of its own accord, whether impregnated before reaching the uterus or not.

It being, therefore, probable that the ovule is embedded in the uterus, the action of the spermatozoa in the genital tract would seem to positively prove it.

In the lower animals it has been proven that the spermatoc fluid passes through the tubes, but this is certainly not the case in a human female, as the fluid would have to pass through both tubes and the spermatozoa remain intact, in some cases for twenty days, until an ovule should come. Impregnation can take place at all times, as has been proven. If the spermatozoa could remain alive and intact, they could readily be found, but never have been, in the human female, except in the uterus. If impregnation takes place in the tubes, it would be possible to find spermatozoa at all times in every cohabiting woman; this not being the case, impregnation must take place in the uterus. It might be asked why the unimpregnated ovule is never found in the uterus (except in the case of Hyrtl)? We might answer, that there *never has been a systematic search for it*.

Lewenthal's question, why pregnancy does not occur after every act of coition, can readily be answered. All cases of sterility in man and woman must be excluded, also when efforts are made to prevent pregnancy; and, furthermore, the spermatozoa do not always enter the uterus; and also in some cases the ovule has just reached the stage of decay. If pregnancy does not occur after every act of coition, we can only say it is a deviation from the normal condition; the why cannot always be answered—no more than we can explain the causes of death by shock.

It is thought by Coste that impregnation takes place at the ovary, and he cites extra-uterine pregnancy to prove it. This is certainly wrong, as it really proves the contrary, being a rare and abnormal form of pregnancy. The passage of the ovule must be arrested, the spermatozoa must pass through the uterus and into the tubes, and then with diminished vitality the latter must impregnate the former. The Graafian follicle only ruptures at the latter part of the hemorrhage; therefore, the act of coition must take place during menstruation. All these factors prove how seldom the ovule and vital spermatozoa meet in the tube, and hence why extra-uterine pregnancy must be of rare occurrence. If impregnation took place at the ovary, or in the tubes, the latter (as has been found) being often diseased, extra-uterine pregnancy would be of frequent occurrence.

As it has been proven that coition can be fruitful at any time during two menstrual periods, and as a union of the two component parts must take place, and as each appears at different times (even separated by quite a number of days), it is necessary that *one component must wait for the other*. As the spermatozoa, from analagous reasoning and positive proof, cannot be the waiting part, it must be the ovule which waits for its partner; and this can only be possible, according to anatomical and physiological laws, if the ovule becomes imbedded at that place (be it normal or abnormal) where it afterwards will develop.

The vitality of the ovule after imbedding is beyond a doubt. In the lower animals the vitality exists for several days. Thury's hypothesis, which has been proven in cattle as correct, proves that the ovule has a certain extra-follicular vitality. What right have we to limit this vitality of the human ovule to three, five or twelve days? None whatever.

The periodicity of menstruation is typical of the human race. This was always assumed

to show the ripeness of the ovule, and as it is probable that the ripening takes a certain equal length of time in each woman, only one ovule must ripen at the same time. But the very opposite is the case; the ovary of every woman will show numerous ovules in different stages of development, and which must necessarily reach the period of ripeness at different and irregular times; consequently they cannot be the cause of a periodic recurring menstruation.

The extra-follicular ovules have vitality for some time, how long we do not know, but it cannot be too short. As pregnancy can occur at the very end of the intermenstrual period, therefore this vitality of the ovule must exist during this whole time. If we consider the formation of the menstrual decidua, only found in the human species, due to the imbedding of the ovule, then menstruation must indicate the death of the ovule and decay of the menstrual decidua.

The so far unexplained cause of the periodicity of menstruation is found, instead of being due to ripening of numerous ovules, which develop without any definite rule, we have only to consider the life power or vitality of one perfectly formed individual cell (ovule). The individual variation can also be thus explained as showing the constitutional power of the individual, while the general periodicity shows that of the species.

Pathological varieties also tend to prove the correction of the theory, if, for instance, menstruation recurs at short periods, in women who are weak from any cause, it was always assumed that the ovule ripened sooner; which is a wrong assumption, as in a weak person the development of the ovule ought to be retarded. If, however, we say that in a weak person the ovule is weak also, and dies sooner, we readily explain the cause of frequent menstruation in debilitated women.

Although the rupture of a Graafian follicle is spontaneous, still there may be some exciting cause. Any congestion of the pelvic organs (as during coition) may cause rupture of the graafian follicle during the intermenstrual period, as has been proved by Ritschie, Leopold, etc.

But ovules at this time may not pass through the fallopian tubes, and if they do, will find in the uterus no proper soil for their development, as the preceding ovule has become embedded. If, however, the second ovule should really become embedded, which can rarely happen, and impregnation takes

place, we have those rare cases of twin pregnancy with separate amnion and chorion.

The following conditions are necessary for the embedding of the ovule and the next menstrual process:

1. The ovule must be perfectly ripe.

2. It must pass from the follicle at a time when it has the best chance to soon reach the uterus through the fallopian tubes during menstruation.

3. The place of imbedding must be ready and prepared to form the menstrual decidua.

If these conditions are not present the next menstruation will be abnormal. To this category belongs amenorrhœa.

1. No ripe ovule is developed, or it is of diminished vitality, and consequently is not imbedded, or if imbedded, after a few hours or days it dies and a real menstrual decidua has not been developed, consequently no hemorrhage takes place. If during the short time while the ovule is in the uterus, spermatozoa should enter, pregnancy might take place, which explains those rare cases of pregnancy occurring during amenorrhœa. During lactation the absence of or weak ovules would explain the absence of menstruation, and the occasional occurrence of pregnancy at this time.

2. If during menstruation from some cause no ripe ovule is present, none can be imbedded, no menstrual decidua is formed and the next menstrual does not appear. The menstrual congestion which aids the development of the Graafian follicle and ripening of the ovule being absent, the ovules are weak, do not become imbedded, or if they do, die in a short time. The amenorrhœa continues until a strong healthy ovule is again imbedded, which then dies and causes the menstruation. This also explains why pregnancy can occur after long-continued amenorrhœa.

3. If the healthy ovule is formed and passes into the uterus, the latter does not allow its imbedding, on account of severe endometritis, profuse secretion, etc. The physiological amenorrhœa during pregnancy can be readily explained in the same manner, the uterus is occupied, and if during persistent development of ovules, one should be really imbedded, and become impregnated, we would have a case of twin pregnancy, where one fœtus is fully developed the other imperfectly; or a case where one child is born a few weeks or months after the other. In some women, also, there is no tendency to hemorrhage, they have ovulation, but no real

menstruation; they have instead a recurring leucorrhœa, so-called "white menstruation."

Cases occur where two or more causes are present to prevent imbedding of an ovule, and to cause amenorrhœa.

Anomalies of menstruation, such as profuse and irregularly recurring hemorrhages, can be readily explained, as they have no connection with menstruation at all, in fact, often occur during amenorrhœa, and are due to other diseases (tumors, ulcers, displacements, etc.).

The following points also go to prove the correctness of the view that the ovule becomes imbedded, etc.:

Many observers have recorded that young girls, some four weeks before the first appearance of menstruation, have all the nervous symptoms, which are found later with every recurring menstruation. A ripe follicle has burst, the ovule becomes imbedded and in four weeks causes the first menstruation.

Immediately after childbirth ovulation and imbedding may take place, as is proven by the occurring of pregnancy a few weeks after childbirth and before the recurrence of menstruation. The irregularity of menstruation before the climacteric period, only proves the theory as the ovule does not have the same extrafollicular vital power, and the thickening of the albuginea prevents, often, rupture of a Graafian follicle.

The experiments of Lawson Tait have caused him to conclude that the anticipated climacteric period *always occurs* with certainty *when both tubes are removed*. This goes to prove the correctness of the Læwenthal theory, as no ovule can get into the uterus, even if a third ovary exist, or some ovarian stroma remains behind, and consequently menstruation cannot occur.

The well founded fact that impregnation is most liable to occur immediately after menstruation, also tends to prove the correctness of the theory, as the further removed from menstruation, the ovule possesses less vital power and pregnancy is not so liable to occur.

The observations of Raciboski and Gubler on the influence of different diseases on menstruation, show that grave acute diseases would have no influence on menstruation if commencing just before the expected period, but might hasten its appearance; but if the acute disease made its first appearance immediately after menstruation, the latter would not recur. This can be explained as follows: If the menstrual decidua is well formed, it will die and

cause the menstruation; but if not well developed, it will disappear without causing a hemorrhage. The ovules occurring during severe diseases, not having sufficient vital power, do not become imbedded, and menstruation cannot occur.

Post-mortem examinations of non-menstruating girls and old non-menstruating women often show that a Graafian follicle has ruptured a short time previous. This simply proves that ovules escaped which did not possess extra-follicular vitality—that is, never became imbedded.

If Ritschie, Leopold and Slaviansky have found that follicles rupture during the intermenstrual period, we can explain it readily. Menstruation is not the only cause of a rupture of the Graafian follicle, although it materially hastens the ripening of follicles; but menstruation is periodic and independent of ovulation, due to the death of the imbedded ovule.

The menstrual decidua, its situation, and similarity to the decidua of pregnancy; the occurrence of pregnancy during the intermenstrual period; the prodroma of puberty, etc., are all explained by this theory of menstruation.

The theory of Læwenthal leads him to conclude that menstruation is not physiological, but pathological, and not necessary to health; that menstrual blood is normal blood and does not contain any poisonous substance that must be eliminated from the system; that in amenorrhœa, emmenagogues are useless or harmful, as some constitutional disease (chlorosis, hysteria, etc.) causes amenorrhœa, but the latter causes no disease itself. Amenorrhœa simply indicates some disease of the system, and should be looked upon as a powerful *aid* to reinvigorate the body, not be *fought as a foe*. A woman is not healthy because she menstruates, but in spite of it. He does not want to stop all women from menstruating, but simply suggests a reform in the treatment of the disorders of menstruation. He reports cases of chronic invalids with pain and nervous disturbances after menstruation, which had been subjected to all kinds of treatment without benefit, until he lessened menstruation by quiet and hot water injections, with wonderful result. The cases all recovered, although he checked menstruation so much that only two drachms of blood were lost.

The object is to diminish the hemorrhage as much as possible; it cannot be entirely stopped, as the decay of the menstrual decidua

will always cause some bleeding, but this should be limited to a discharge of bloody mucous.

In conclusion, Lœwenthal thinks that it is desirable to carefully search for the ovule (near the tubes) in all post mortem examinations; also to note the condition of the mucous membrane of the uterus in reference to swelling and menstrual decidua, and also the time of the last menstruation and the character of the corpus luteum.

Careful examinations of this kind will, he thinks, prove most conclusively the correctness of his theory of menstruation.

21 MACOMB ST.

Some Objections to Lœwenthal's Theory of Menstruation.

BY HELEN WARNER, M. D.*

I WAS stimulated, by Dr. Carsten's paper at the last meeting, to a careful reading of Lœwenthal's article in the *Archiv für Gynäkologie*, and while reading it I thought that I could not, perhaps, do better than to offer you, instead of a paper on a different subject, a few of the objections that occurred to me.

The paper is a very exhaustive one, taking up the subject from every conceivable point, and at first view the theory seems very plausible, accounting, as it does, for some phenomena which have been felt by the profession to be loopholes in the classical theory.

When once it is admitted—and I think this point of Lœwenthal's is well taken—that investigations and experiments on other members of the mammalian order are not conclusive as regards man, the builder of a theory on a matter so much in the dark as the reproduction of the species must rest very much upon conjecture. It is impossible that the theory should in any strict sense be proven; that is, that it should rest on an absolutely scientific basis. But a theory not absolutely demonstrated often reaches general acceptance because it seems, on the whole, to tally with the known facts better than any other that has been offered; and that, I think, Herr Lœwenthal to the contrary notwithstanding, is the position of the so-called classical theory to-day.

I wish to present to you to-night a few of what seem to me to be the weak points in Lœwenthal's argument:

1st. The death of the ovum which has remained the whole intermenstrual period im-

bedded in the uterine mucosa, produces the pelvic congestion, which at the same time precipitates the rupture of the Graafian vesicle, the discharge of another egg, and the menstrual flow. The second egg arrives in the uterus about the close of the flow, at once imbeds itself in the uterine mucous membrane—if unimpregnated to die in its turn. As a result of this view, the probability of impregnation would be in inverse ratio to the time elapsed since the cessation of the menses, and impregnation during the flow be practically impossible. Impregnation during the menstrual flow is unusual, merely because coitus at that time is unusual; but it is not impossible. Indeed, coitus during menstruation has been thought by some authorities to be specially fertile. Bedford quotes one case which occurred in his own experience, and I suppose everyone has read of the case of Henry II., of France, who at last obtained an heir to his crown, long despaired of, by visiting his queen, by the advice of his physicians, only during her menstruation. A woman is nearly, though not quite, as likely to become pregnant just before, as just after, the menstrual period. The time in the menstrual month when impregnation is comparatively rare is from the fifteenth day, counting from the commencement of the menses, to the twenty-fifth or twenty-sixth, though it may take place at any time. I am unable to substantiate this statement by my own observations, as I have made no special study of the subject, and so have no record of cases where the date of impregnation could be accurately fixed. Bedford claims that the days just before menstruation are more fertile than those succeeding it. Cazeaux quotes Rariborski as saying that of fifteen women who were able to fix accurately the date of impregnation, the number was about equally divided between the days just before and just after the flow. I think Lowenthal makes out a case against himself in his account of the Jewish women, who are, as we all know, exceptionally fertile, and who are, if they follow the regulations of the Talmud, limited to the latter half of the menstrual month for sexual congress.

Women generally reckon pregnancy from the end of the last menstrual period. Now, it is a matter of common experience, known to nurses and mothers of families, as well as physicians, that if a woman passes the time set for the termination of pregnancy by a few days, the labor does not commonly take place till between three and four weeks from the

* Read before the Detroit Obstetrical Society.

first reckoning; that is, impregnation took place just before, instead of just after, menstruation.

If anatomical researches prove anything on this point, it seems to be that the time of rupturing the follicle is irregular. Of Bishoff's thirteen famous cases—three of which are not available for us, as the date of menstruation was unknown—three died during menstruation, and the ovaries showed a recently ruptured follicle; in the fourth, two days after menstruation the follicle had not ruptured; in the fifth and sixth, the follicle ruptured before or during the flow; in the seventh and eighth, death occurred ten days after menstruation—in one the follicle had not yet ruptured, in the other it had just done so; in number nine the follicle ruptured during the intermenstrual period; and in the tenth, dying just at the close of the intermenstrual period, the follicle was found freshly ruptured.

Leopold in a paper on the relation of menstruation to ovulation in the *Archiv. für Gynäkologie*, Vol. xxii, gives a series of twenty-nine cases in which the ovaries were removed either from the cadaver in cases of sudden death, without chronic illness, or by castration from the living subject. These investigations were very carefully undertaken. Histories of all the cases were procured. The ovaries were carefully drawn by an accomplished draughtsman while they were fresh, and after hardening sections were made from all of them. His paper is illustrated by excellent plates. The tabulated results show that freshly opened follicles were found in ovaries removed on the first, fifth, eighth, tenth, twelfth, and eighteenth days of the menstrual month, and one in a patient where menstruation was irregular, on the thirty-fifth day from the commencement of the last menstrual flow. His tables seem to me conclusive on one point at least, that a ripe Graafian vesicle may rupture at any time during the month, though it more commonly does so during the menstrual congestion. The follicle ripening while there is comparatively little blood in the ovary, during the intermenstrual period, is smaller, ruptures with very little or no hæmorrhage, and so produces instead of a typical corpus luteum a scar which Leopold characterizes as the atypical corpus luteum which quickly disappears. This accounts for the fact that occasionally, when the ovaries are examined, no corpus luteum is found corresponding to the date of the last menstruation.

II. By Löwenthal's theory the length of the

intermenstrual period is measured by the vitality of the ovum. Hence in ill-health the ovum having less vigor dies earlier and menstruation becomes more frequent.

Now this is not the rule. In bad conditions of the general health not directly affecting the uterus, menstruation is more often delayed than hastened, but still more commonly it is not affected at all. The regularity of the period is much more influenced by the condition of the uterine mucosa than by the general health of the individual, and a few applications of mild caustic to the uterine mucous membrane, or some other means of reducing the uterine congestion, is of more use in too frequent menstruation than quarts of tonic mixtures.

III. The objection often urged against the classical theory that menstruation should take place without ovulation, holds good against Löwenthal's theory, and he has no answer except the rather wild one, as it seems to me, of a possible presence of a third ovary which is capable of performing its functions after the others have become degenerated and been removed. Did any of the gentlemen present ever see a third ovary, either in an operation or in a section of the cadaver? Have they seen or heard records of any such cases? I do not say it is impossible that three ovaries should exist in one woman, but such a *lusus naturæ* is certainly extremely rare, while cases of menstruation after the removal or complete degeneration of both ovaries are, though not the rule, quite common. Reeves Jackson, in a paper on the Ovulation Theory of Menstruation in the *American Journal of Obstetrics*, Oct., 1876, gives a table of 27 cases in women under 45 in whom both ovaries were successfully removed; of these 11 menstruated regularly as before, in one case the menstrual molimen occurred with a white discharge, two had irregular sanguinolent discharges. In the remaining 13 the menopause was established. Fehling, in an account of ten castrations performed by himself, mostly for the purpose of bringing about the menopause in fibroma of the uterus, says that in 41 of his cases the menopause occurred at once, in three after a period of irregular discharges of blood, in two the menstruation persisted, though the rhythm was disturbed, one case was incomplete as it was impossible to remove all the ovarian tissue.

Yanfer had much the same experience. In ten cases the menopause occurred in seven, in four abruptly, in three after repeated hæmorrhages. In three the menses persisted

undisturbed. Hegar reports rather differently; of 41 cases, only one menstruated regularly after the operation, in 30 the menopause occurred at once, in nine there were for a time irregular hæmorrhages. It is impossible to think that there could have been a third ovary in all these cases, and it is hard to believe that these operators, most of them surgeons of a special skill, should have failed of removing all the ovarian tissue in so large a proportion of their cases.

IV. But the position of Lœwenthal's, which I regard as especially weak and at the same time especially mischievous, is that menstruation is, in itself, an abnormal process, and one that ought to be suppressed. This position is not a new one. King, in an article published in the *American Journal of Obstetrics*, August, 1875, entitled: "A New Basis for Uterine Pathology," takes the same ground—that is, that menstruation is a pathological process. King's paper, I mean no disrespect to the learned Professor, is too absurd to deserve serious consideration. He professes that every healthy girl should become pregnant before menstruation is established, and that subsequent pregnancies should follow each other so rapidly during the whole period of sexual activity that there should be no opportunity for the pathological processes of menstruation. It seems to me that any sane person, stopping to consider that many healthy girls menstruate before they are twelve years of age, some as early as ten, the greatest majority before fourteen, while they are yet children, long before they have finished their growth, would see that a race propagating itself in that fashion, would rapidly deteriorate and eventually die out.

But, if I understand Lœwenthal rightly, it is the hemorrhage, not the menstrual molimen, which he considers pathological. All hemorrhage is, he claims, measurably pathological. To use his own words, "Für unsere henlige Medicin ist eine physiologische Blutverluste undenkbar." Which is the meaning of the term physiological as opposed to pathological, is it not a condition of health opposed to one of weakness, normal to abnormal? Now all healthy women, as far back as history exists, have menstruated, except during pregnancy and lactation. Nature sometimes makes mistakes, it is true, but it is to me more unthinkable that a loss of blood should be physiological than that she should make a mistake on so grand a scale. A woman, during the age of sexual activity, neither pregnant or nursing, who does not menstruate

is not well. It may be that the amenorrhœa is conservative; so often is a bilious diarrhœa; but it is not normal, and the return of the menstrual flow is one of the best indications of returning health. All healthy women will tell you, and very many who are far from healthy, that the loss of blood is a relief. I do not mean merely that the vague sense of uneasiness, which is said to accompany the ovulation, or congestion preceding the flow, disappears with it. Many women notice this very little or not at all, but that the loss of blood in itself, and that especially when it is free, brings a sense of comfort and lightness to the whole system, for which the French *bien-être* is a better equivalent than any English word I know.

A woman who, by any imprudence, checks her menstrual flow, even when no serious harm is done—that is, where no inflammation is set up in the genital tract—feels, nevertheless, more or less ill till after her next menstrual period.

It is true that during menstruation the health is more easily disturbed than at other times. The uterus and its adnexa are heavier and more easily displaced by sudden and violent exertion, or extreme fatigue. The system is more sensitive to cold and the effects are more serious than at other times, but this is all true in a much greater degree of pregnancy and parturition, yet no one claims that these conditions are necessarily pathological. The dentition of infants is attended by peculiar dangers to the child, yet does anyone consider the process in itself pathological? Is it, then, too much to claim that a function of any organ which has persisted, probably since the creation, certainly since historic times, in all healthy individuals of the species, whose suspension or suppression always produces discomfort, cannot be pathological, even though its *raison-d'être* is imperfectly understood?

And, lastly—I would offer this merely as a suggestion, which I have no time to elaborate—is it not possible that the real reason why this discharge of blood is needed to preserve the balance of the circulation in the human female and not in those of the lower species, lies in the higher nervous organization of the former?

The Local Government Board estimate that in London, Eng., from sixty to seventy thousand dollars is annually paid for water under the name of milk.

Menorrhagia Produced by Mental Disturbance.

Report of two Cases.

BY H. W. KINNEY, M. D., DETROIT.

I BELIEVE that menorrhagia should always be regarded as a symptom, and one that may be produced by a great variety of both functional and organic affections.

Hence, differentiation at once becomes the most important and most difficult of the physician's duties in reference to this condition.

The causes which I have assigned for the increased menstrual hemorrhage in the following cases, that of mental shock and continued agitation or worry, for some reason are not mentioned by a number of the authors that I have been able to consult; but I believe that physiology and clinical experience will bear me out in the assertion that a violent mental shock, or continued agitation, may materially disturb the functions of any organ in the body.

Thus it is well known, that a severe fright, or continued mental worry, often perverts the functions of the mammary glands during lactation, produces jaundice, suspends digestion, causes an increased flow of urine.

Hence it cannot be surprising that the menstrual function of the uterus should be disturbed by the same causes, and the catamenial flow be increased in quantity even when the organs of the pelvis are in a normal position, and free from any organic affection.

It is not, however, the purpose of this paper to discuss the mechanism of psychical influences in disturbing the functions of this particular organ, but simply to report the following cases, in which the increased menstrual hemorrhage could not be traced to any other cause than the ones I have assigned.

Mrs. K., a short, fleshy lady, 35 years of age, and mother of five children. Menstruation made its first appearance at the age of 14 years, being accompanied with but slight pain, and with the exception of the interruption incident to pregnancy and lactation, occurred every 28 days, the flow being moderated in quantity, and usually continuing about three days, until the 15th day of January, 1883, when, just two days prior to the catamenial period she received a severe mental shock, caused by her husband being brought into the room, apparently in a lifeless condition and covered with blood, at the sight of which she fainted, and on being restored to consciousness observed that she was flowing quite profusely, which continued for eight days.

At each subsequent period the flow appeared just two days earlier than the accustomed time prior to the shock, and usually lasted from eight to ten days, leaving her feeling weak and exhausted.

When I first saw her, June 15th, she was flowing most profusely, and had been for nearly a week; in fact, to use her own words: "If she stood on her feet the blood would come in perfect gushes."

After satisfying myself that she was not suffering from an approaching abortion or miscarriage, I inserted a tampon and gave ext. ergot fl. oz. ss, tr. digitalis drops xx, then ordered 20 drops ergot and 2 grs. quinine every three hours. The next day she felt much better, the flow having quite ceased. I then ordered a mixture of iron and quinine, and suggested the propriety of a physical examination of the organs of the pelvis as soon as her condition would permit. I made the examination July 30th, but failed to discover any displacement or organic affection of any of the organs of the pelvis.

After ascertaining that there were none of the other conditions existing which are said to produce menorrhagia, such as constipation, menorrhagic diathesis, the various blood dyscrasias, or disease of any of the other organs of the body, and taking into consideration the history of the case, I concluded that the excessive uterine hemorrhage was the result of the violent mental shock and subsequent worry during her husband's illness. The treatment consisted of the use of such medicines as phos., iron, quin. and strychn., and just prior to and during the first stage of the flow, ergot in full doses, four times a day. Under this treatment menstruation returned to its normal condition in the course of three months.

Miss G., aged 30 years, a single lady, above the medium height and rather delicate, in whom the menstrual function first made its appearance at the age of fifteen years, the flow being rather scanty, usually lasting about four days, until the spring of 1883, when she met with some financial embarrassment causing her considerable mental anxiety, added to which was the grief incident to the death of an only brother. This occurring just prior to the menstrual period, the flow appeared at the usual time but was far more profuse and lasted much longer than usual, and continued to increase at each subsequent period, also being accompanied with many of the phenomena indicative of extreme exhaustion.

When I saw her, November 25th, she was in bed, for if she assumed the upright position it caused her to feel faint. She looked very pale, in fact there was but little color to the mucous membrane of lips and mouth; on inquiry I found that she was flowing and had been for some days, although she was taking medicine to check the hemorrhage, and applying cloths wrung out of cold water.

I immediately inserted a tampon and gave ergot 3 ss, tr. dig. drops xx; then ordered twenty drops of ergot and two grains of quinine every three hours, with an occasional spoonful of brandy. This was continued for twelve hours, when I removed the tampon, and found that the hemorrhage had quite ceased.

I then ordered elixir of iron, quinine and strychnine, a teaspoonful in a tablespoonful of brandy four times a day, and in a few days made a thorough physical examination of the organs of the pelvis, but as far as I was able to discover they were normal in every respect, and free from any organic affection.

As I was able to exclude all the causes arising from the various conditions of the blood, turning my attention to the other organs of the body, I examined each in turn, but was unable to find any condition that might account for the excessive hemorrhage.

Therefore, after this thorough investigation, I felt quite sure that it was a case of menorrhagia caused by mental worry.

The treatment consisted of a continuation of the previous prescription with an occasional laxative, and vaginal injections of hot water twice a day, also ergot and digitalis just prior to and during the first part of the flow.

This treatment, with slight variations, was continued for four months, at which time she was much improved in spirits, and the flow had diminished to its former duration and quantity.

Case of Inverted Uterus of Six Months' Standing.

REPORTED BY CHAS. SHEPARD, M.D., OF GRAND RAPIDS.

NOVEMBER 25, 1882, I was called to see Mrs. K—, of Howard City, aged twenty-nine years, mother of four children, the last of which was born on the 25th day of May, 1882.

Mrs. K— gave me the following history of her last confinement and after-treatment up to the 25th of November, at which time I saw

her, in consultation with Dr. Hathaway, who was then attending her. Labor commenced in the night of the 19th of May, 1882. A physician was called, who attempted to expedite the delivery of the child by pressing heavily upon her abdomen with his hand, at each recurring pain. The child was born in about four hours, and the physician immediately proceeded to deliver the after-birth, by introducing his hand into her vagina or womb and drawing it away, at the same time pressing heavily with his other hand upon her abdomen. She immediately had what she called a "sinking spell," and soon commenced flowing excessively. This occurred Saturday; Sunday afternoon or Monday morning the patient discovered something hanging from her vagina, and the doctor was sent for, who on examination said it was some of the membranes that were torn off and left behind. In attempting to remove this, he discovered a large tumor, filling the cavity of the pelvis. This he informed them was another child, and proceeded to deliver it by getting hold of it, and drawing it out external to the vulva. On account of the pain and distress this gave to the patient, the doctor was asked to desist from further treatment; and another physician was called, who pronounced it inversion of the womb, and proceeded to replace it by simply crowding it back into the vagina—where it remained until I saw her on the 25th of November, still inverted. Several physicians, at different times, were called to see her, on account of excessive flooding spells and pelvic pains. The treatment she received gave her nothing more than temporary relief.

The hemorrhage was best controlled by vaginal injections of hot water, administered under the direction of Dr. Hathaway, of Howard City.

When I first saw the patient she was pale and markedly anæmic, with small and feeble pulse. She was troubled with ringing noises in her ears, and had a pretty constant watery discharge from her vagina; she could not take the erect position without fainting. She was brought to Grand Rapids in a few days on a cot bed. I commenced the work of replacing her womb by introducing into her vagina a soft rubber cup (that would take in the fundus of the womb), to which a curved stem was attached about six inches in length. To the lower end of this stem elastic tapes were attached, the ends of which were fixed to the band of a "London supporter" surrounding her hips; the tapes being drawn

tight enough to keep up a steady pressure, and as much as the patient could tolerate.

This instrument was kept in place forty-eight hours, with simply the effect of shortening the body of the womb and bulging its sides, without doing anything towards replacing the organ.

After this a metallic cup was used which was deep enough to take in the fundus and body of uterus nearly up to the inner os. This had the effect of supporting the sides of the womb; and now the pressure at the end of twenty-four hours began to make some impression upon the os and cervix by way of replacement.

At the end of thirty-six hours the os and cervix had folded back over the cup and reinversion had taken place, as far as could be with the cup in that position. I had some trouble in removing the cup or instrument, which produced slight soreness, and on this account I was obliged to abandon the treatment for one day, at the end of which time it was resumed with a more shallow cup.

On making a visit at the end of twelve hours I found the womb replaced, with my instrument in its cavity; which I had very little trouble in removing. After this the patient made a rapid recovery, and has given birth to another child since, without any trouble.

In the foregoing report I am aware there is nothing in the treatment of the case but what has been done before. I report it, however, as a case illustrative of meddlesome midwifery, and also to suggest some improvement in form of instrument for the reduction of these cases, which is this: I would have made, of hard rubber, two cups with stems of proper length and curve to them, one resting within the other. The outside cup of such size and depth as will take in the fundus and body of the inverted womb, nearly up to the inner os. The inside cup made quite shallow and resting in the bottom of the outside cup, with its stem passing through the outside hollow stem, and two inches beyond its outer end.

The elastic tapes to be attached to the outside stem and their ends to the band surrounding the hips and drawn tight enough to get the desired pressure; and when the os and cervix had folded back upon the outside cup as far as it could, then elastic or hand pressure can be applied to the inside stem and cup and the fundus and body of the uterus

crowded out of outside cup and into position in a very short time.

This form of instrument will do away with the necessity of packing the vagina with cotton about the cervix, as recommended by Dr. Thomas and others, and will replace all inverted wombs (not made permanent by adhesion or otherwise) in a safe and sure way, and much to be preferred to the reduction at one sitting, as recommended and practised by the late Dr. White, of Buffalo, N. Y.

Correspondence.

Letter from Vienna.

Editor Lancet:

Vienna, from a medical point of view, is rather a trite subject for medical journals, but one which seems always to be of interest to American practitioners. The first impression a new-comer receives on visiting the Allgemeine Krankenhaus, or General Hospital, is one of bewilderment and disgust at the methods in vogue here for giving information as regards lectures, private courses, etc.; and unless one meets a friend who has been through it all, he is apt to spend several days getting his plans in order. The notices of special courses are posted on bulletin boards, stair entrances, etc., in half a dozen different places about the institution, which in itself is rather complicated, consisting as it does of nine *hofs*, or courts, with innumerable wings, and occupying about ten acres of ground. A general catalogue is published, but the edition is soon exhausted, and if one is fortunate enough to get a copy it is of little use after the first six weeks of the semester, as the special courses usually are of that duration, and the hours are changed equally as often to suit the convenience of professor or students. Once fairly at work here, however, every one becomes enthusiastic over the amount of material and the facilities afforded for seeing it. Knowing the subjects which he wishes to study, a student can make up his programme of hours and professors from the bulletin boards, and it is possible to study one subject alone, with different men, from 8 a. m. until 8 p. m.

One great advantage here, also, is that no time is lost running from one hospital to another, as everything in the *Hospital* is under one roof, while the Polyclinic is but one square away. There are two University professors for each department, and they

have a large number of assistants, and these latter, as a rule, are the ones who give the special courses, which are the great feature of medical study here, as in Germany. Thus, Professors Bamberger and Nothnagel lecture on General Medicine; Professors Stellwag and Alt on the Eye; Politzer and Gruber on the Ear; Billroth and Albert have the chair of Surgery; Carl Braun and Spaeth, Obstetrics and Gynecology, etc. Each of these departments would form the basis for a long article in itself. I thought the details of the working of a single department might be of more interest to those desiring some idea of the methods of medical study here, than a superficial view of the whole.

The opportunities for obstetrical study are unsurpassed, and this is one of the most favorite branches with Americans. The study is combined with that of gynecology; but for the latter purely, Professor Martin's clinic at Berlin is generally preferred. The birth statistics of the Hospital give an idea of the large number of cases to be seen in the course of a month—more than can be seen anywhere else in six months, or a year.

Prof. Carl Braun has one birth ward, Prof. Spaeth another, and Prof. Gustave Braun a third, and all are accessible to students, and in the first two they are allowed to practice, but in the third the care of the cases is entirely given to midwives, for whom Gustave Braun lectures. The number of births in each ward is over three thousand yearly, and the average aggregate is about nine thousand six hundred. Compare this material with that of the Rotunda, Dublin (which has perhaps a reputation next to that of Vienna), where the annual number of cases is only twelve hundred.

A ticket costing four dollars, good for six months, and taken with either of the first two Professors, or both, allows the student to witness all deliveries and obstetric operations, and to have charge of cases himself on certain days—the list of students being divided into classes of four, each being on duty twenty-four hours and having all the cases he can get in those hours, long enough time being reserved between each for the temperature to be taken before going to another. Should the temperature of any case be elevated, the student can take no more cases for that day. However, this is rare, there being very little septicæmia or puerperal fever.

There have been thirty deliveries daily in Prof. Braun's ward, but the average is below that—usually from ten to fifteen.

Prof. Carl Braun lectures or performs gynecological operations two hours daily, five days each week, and his clinic is attended by students from every part of the world. The results from ovariectomy are very good here, but in some respects their methods do not seem equal to those of our best operators in America.

Prof. Spaeth also operates at the same hours, but his lectures are rather intended for undergraduates, while those of Prof. Braun are for practitioners and advanced students.

The first and second assistants give special private courses on obstetric operations, gynecological diagnosis and operations, and also what are called *touch*-courses. These are the most expensive in Vienna, costing fifty guldens, or twenty dollars, for twenty-five lessons—not very high, judged by the American standard. The classes are limited to four men, and they are given a thorough training in obstetric diagnosis.

The surgical, ophthalmic, nervous and other departments are equally extensive, but they will have to be reserved for a future letter.

A little gossip may serve as a dessert to this dry meal of facts. Dr. Koller, the discoverer of cocaine, who is an assistant in one of the clinics, has just fought a duel with one of Prof. Billroth's assistants. Some disagreement arose over a patient, and Dr. K. resented an insult with a blow. A challenge followed, and Dr. Koller chose sabres. He escaped without a scratch; his opponent was badly cut, but there is as yet no vacancy on Prof. Billroth's staff of night assistants, I believe. It now only remains for the civil law to pardon him for fighting, while the military law would have punished Dr. K. had he not fought. It is about as hard for the would-be duelist to choose between this Scylla and Charybdis as for the ordinary American mind to grasp the intricacies of Austrian law.

Respectfully,

DR. ARTHUR W. HURD, Detroit.

Spray in Ovariectomy.

Editor Lancet:

The following is an extract from a recent work by Dr. Emmet (*Emmet's Principles and Practice of Gynecology*, p. 715): "In this country I do not know of any operator who now employs the carbolic acid spray." This statement implies that the writer is not persuaded of the value of spray in ovariectomy. My own experience has led me to an opposite

opinion. Indeed I should not like to do a laparotomy for any purpose without antiseptic spray. I have been led to this conclusion by the results of one hundred and eighty three cases of removal of cystic ovaries, of which I have only lost twenty-one—but more especially by the result of the last one hundred of these cases, only ten of which were fatal, while thirty-eight were consecutively successful. I feel that to omit the antiseptic spray would be to deprive the patient of one of the ready and efficient elements of success.

As I can hardly hope for much better results than those I have cited, and being quite content to let well enough alone, I shall hesitate before disturbing my present plan of operation by giving up a detail to which I attach much importance.

I am very respectfully,

Your obedient servant,

JOHN HOMANS.

161 BEACON ST., BOSTON, Feb. 17th, 1885.

Proceedings of Societies.

Detroit Academy of Medicine.

JANUARY 6, 1885.

The Academy met at the office of Dr. Noyes.

Dr. Chittick exhibited a pathological specimen, giving the following history of the case: I first saw the patient from whom this specimen was taken, a week ago Monday evening. She was then vomiting stercoraceous matter. There was a tumor in the lower part of the abdomen which seemed to be uterine. The vomiting could not be controlled by such remedies as the oxalate of cerium, and the patient was already nearly exhausted. She died on Friday, and a *post mortem* examination showed that the tumor was situated in one of the fallopian tubes, as may be seen by an examination of the specimen.

Dr. Andrews: The case had been seen previously by other physicians. Dr. McLean made an examination on the Friday preceding; he did not find any tenderness at that time.

Two years ago the woman supposed she had a miscarriage. She missed her turns two months, and then had a hemorrhage, and for some time afterwards was an invalid. Subsequently it was discovered that she had some kind of a tumor. Dr. McLean and others, in examining her, found it impossible to introduce a uterine sound.

Symptoms of peritonitis developed after

the examination made on Friday previous to her death. Her bowels were obstinately constipated, and the presence of stercoraceous vomiting created a suspicion of some mechanical obstruction, which, however, the *post mortem* did not justify. It was probably caused by failure of peristaltic action, due to presence of the tumor.

Our diagnosis, in the light of the *post mortem* examination, was of an extra-uterine pregnancy, and yet we did not find any remains of bones or hair. Perhaps it may be regarded as an extra-uterine mole.

The tumor was of a grayish color, crossed by bands of fibrous tissue. It contained a grumous fluid in which there were some flocculi of lymph, and was distended also with gas. The presence of gas had been recognized in the physical explorations. There was no true tympanites, but there seemed to be an accumulation of gas, overlying a thin stratum of fluid.

There were four or five pints of fluid. The walls of the cyst were quite thick. The tumor was firmly adherent to the tissues on the right side of the pelvis. There were no traces of remains of a foetus, but at one point on the wall of the cyst there was something like placental tissue.

Dr. Noyes brought before the Academy a patient, of whom he gave the following history:

About a year ago his sight began to fail. He was a young man apparently in vigorous health. He did not complain of pain in the head, or dizziness, and he gave no history of specific disease. He is a German, a farmer by occupation. He had been under treatment six months, and had subsequently gone along nearly six months more without treatment, when he came to me last November. I found the sight nearly gone. I made a diagnosis of an atrophic condition of the optic disc, with choroiditis disseminata. There were also subjective symptoms of retinal irritation, such as flashes of light, etc. The prognosis of course was unfavorable. I thought it doubtful whether vision could even be improved by treatment. The patient, however, was a full-blooded subject, and it occurred to me that possibly some temporary benefit might be obtained from depletory measures. I accordingly put him on a vigorous course of cathartics. I have physicked him thoroughly two or three times a week, with results which, although necessarily not permanent, are very gratifying. The patient now has vision in the right eye equal to one-

fifth the normal, whereas when he came to me he could not even count figures.

Dr. Connor: The case is certainly one in which we cannot look for improvement. The effects of treatment are not often so marked as in this case.

Dr. Noyes: I have to report another case in which I have used the muriate of cocaine. The patient was a cook, who had been struck in the eye by a drop of boiling lard, while frying doughnuts. She was suffering extreme pain, of course, and the eye was much injected. I immediately put into the eye a drop of a four-per-cent. solution of the cocaine muriate, which the patient at first declared aggravated the pain. In five minutes, however, she said the eye began to feel better, and I put in a second drop of the solution. A third application at the end of five minutes more gave complete relief, and the next day all signs of irritation had disappeared.

January 13, 1885.

The Academy met at the office of Dr. Connor, the vice-president, Dr. Clark, occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Gillett read a paper on Hereditary Syphilis.

Dr. Cleland: There are a great many interesting points that come up in connection with these cases. A careful analysis is often necessary to determine the source of the disease. The treatment is sufficiently simple. There are only two remedies that have any power—mercury and the iodide of potassium. The best mode of using these, it is true, admits of discussion. It has been asserted that mercury is best employed in these cases by the method of inunction. It is said that when given by the mouth, the remedy is not absorbed, perhaps because the liver is affected by the disease. It is not certain whether mercurials given to the mother will affect the child. Mercury has not been detected in the lacteal secretion. Potassium iodide, when given to the mother, certainly does affect the child through the milk. I am partial to the mercurial jacket. I have yet to see a case where mercury has done any injury.

Dr. Manton: It seems to me a very wise provision of nature that syphilitic mothers rarely go to full term. Mercurials administered to the mother during pregnancy diminish greatly the tendency to abort. Of thirty-

nine syphilitic women submitted to a course of mercurial medication by Löwy, 75 per cent. went on to full term and bore living children, while of 60 without treatment, 76.5 per cent. aborted, generally between the fourth and the sixth month, or gave birth to dead children.

Dr. Andrews: One of my patients I have attended in eleven confinements. Her first four children were healthy. Just before the birth of the fourth the father went south, in the time of the war, and contracted syphilis. The first child born after this developed symptoms of infantile syphilis, at the age of four weeks. Under a course of potassium iodide and mercurials by inunction, these disappeared, but the child succumbed to the malady later. The next child I put upon a course of specific medication almost immediately upon birth. Some symptoms were shown, as in the former case, and the teeth had the characteristic crescent form, but the child was of stronger vitality than the preceding one, and survived. The next child was treated in a similar way, and with the exception of a slight maculated eruption, showed no sign of the syphilitic taint, and is to-day a healthy girl. The remaining four children, however, have died almost at birth. One was born living, but shortly died from hemorrhage from around the umbilical cord, which was tied repeatedly. The others showed no specific lesions, but appeared to lack vitality.

The mother herself did not show any symptoms until just before the birth of the eighth child.

I have not been able to put her on any systematic course of treatment. She says that potassium iodide does not agree with her, and mercury she will not take.

The remarkable points in this case are the persistence of the effects of the specific poison, and the progressively increasing influence it appears to exert over the vitality of her offspring. The father has not shown any symptoms of syphilis since his return from the south; once he has had a non-syphilitic bubo.

Dr. Maire: As regards treatment of this affection, I may remark that the chloride of gold enjoys a high reputation, especially in cases where mercury is contra-indicated. The child may inherit the disease either from the father or from the mother, or may contract it during parturition. It is not easy to understand how a woman can give birth to a syphilitic child, and not herself be infected, and yet this often happens. The chloride of gold

is given in doses of one-fortieth to one-thirtieth grain.

Dr. Wyman: I have treated some cases of tertiary syphilis with this remedy in one-twentieth grain doses. In one case in which mercury had been used, but had ceased to have any beneficial effect, the chloride of gold acted well. A friend of mine has told me that he has succeeded with this remedy in postponing the outbreak of the disease in children until they are old enough to undergo vigorous radical treatment.

Dr. Maire: The chloride of gold is apt to bring on fever; it sometimes causes eruptions.

Dr. Noyes: In my earlier practice, I had such cases as the doctor describes in his paper. Fortunately, these patients generally die. I have employed mercurials in such cases by inunction, as I have also in treating adults.

Dr. Bryan: I would like to offer a remark on the use of potassium iodide. I have thought that some of the symptoms we often see in tertiary syphilis, characterized by amyloid degenerations may be due in fact to the use of this remedy, through the internal congestions to which it gives rise. We find that it is those who receive the most orthodox treatment who exhibit those degenerations. Among negroes, who are often attacked by syphilis, we do not find them. It may be that the negro has a constitution which renders the disease self limiting. I attribute their immunity from these tertiary lesions to the fact that they do not use the iodide of potassium.

PREVAILING DISEASES.

Dr. Cleland: Diphtheria has nearly disappeared in my beat. I see many catarrhal troubles incident to changes in the weather.

Dr. Bradley: I have seen a good deal of pneumonia.

Dr. Connor: There has been an extraordinary number of cases of middle ear disease.

Dr. Andrews: Catarrhal affections are very prevalent, affecting all mucous membranes. I have seen several cases of diphtheria, but confined to two families.

Dr. Maire: I have nothing to report but diphtheria.

Dr. Noyes: The catarrhal troubles that have been mentioned have been very severe; they are due to the sudden and extreme changes in temperature to which we have been exposed this winter.

I may speak of one more case in which I have made use with excellent results of

the muriate of cocaine. A patient came to me this afternoon, nearly crazy with ear ache. the pain affected the whole top of the head. It was nearly dark, so that I did not attempt any thorough examination, but I applied a solution of the cocaine muriate with the result of seeing immediate and complete relief of the pain.

Adjourned.

January 20th, 1885.

The Academy met at the office of Dr. Connor, Dr. Long presiding.

Dr. Bradley read a paper giving an account of a case of rupture of the uterus.

Dr. Manton: I had the opportunity while in Vienna of seeing five cases of rupture of the uterus. All of these were longitudinal ruptures. The transverse rupture, such as Dr. Bradley describes, occurs less frequently, and I have never seen a case. This rupture takes place near the point of junction of the body with the neck of the uterus. In all the cases I saw the rupture was caused by efforts to turn the child. Peritonitis followed the accident, proving fatal within twenty-four hours.

Mechanical violence is the most frequent, if not the sole cause of rupture. It does not often, if ever, result from degeneration of the walls of the uterus.

Dr. Spalding inquired of Dr. Bradley whether in his case the rupture occurred previous to any manipulation. The reply was that it did.

Dr. Cleland: I cannot speak from experience on this subject. Among the many cases of midwifery I have attended, it has not been my misfortune to meet with a single instance of this accident. The causes which produce it, aside from mechanical violence, are obscure. It occurs sometimes during pregnancy, although much more frequently in childbirth. In the former case it must result from a diseased condition of the uterine walls. Undoubtedly it results most frequently from mismanagement of a labor.

Dr. Noyes: I recall an instance which happened not in my own experience, but in that of a physician who had a large midwifery practice in the town where I was located. It was his habit when called to attend a woman in confinement, to give the patient, the first thing, a strong infusion of ergot, often without making previously any examination. In this case he followed his usual practice; the labor pains became very severe, and almost unremittant. Suddenly they ceased, the patient felt something give way, and the doctor

found on examination that the head was no longer presenting.

An abdominal section was made, but the child was found already dead. The woman also died. In this case the accident was to be attributed to the unwarranted use of ergot. The woman's condition was in every way normal.

Dr. Andrews: It is a query in my mind whether in case of an accident of this kind, it would not be best to open the abdominal cavity, clean it out, and treat it like a case of ovariectomy. It seems as if this would give the woman some chance of recovery.

Dr. Jenks: My own opinion concerning turning is that it is the most dangerous operation in obstetrics. I would rather take my chances at making an abdominal section at any time within twenty-four hours after the beginning of labor than to attempt to turn.

Some members of the Academy may have heard of a case of so-called cesarian section, made some years ago by a physician in our State. It was in fact a case of laparotomy after rupture of the womb. The physician had no instruments, but employed for the operation his pocket knife. His patient recovered. Unquestionably in such cases the danger of peritonitis is very much diminished by cleaning out the abdominal cavity.

Dr. Bradley: In my case turning was a simple operation, the fœtus being only six months old. The difficulty was due wholly to obstruction of the passages by the presence of a tumor. I do not think that in the case reported, where septicæmia had existed, and where there was at the time a fœtid discharge from the vagina, an operation would have been admissible.

Dr. Long: In the case reported, I saw the patient before Dr. Bradley arrived. At first she had normal labor pains, but these suddenly ceased. I was not able to make any examination on account of the tumor.

Dr. Jenks: I believe that, even in such a case as this, abdominal section would afford the woman a chance, a slender one indeed, but the only one possible.

VERBAL COMMUNICATIONS.

Dr. Connor: I would like to mention another case in which I have found cocaine of great service. A lady of nervous organization came to me for treatment for an ear trouble. Some years ago she had had removed from the ear a ceruminous plug, but the operation had proved for her quite a formidable one. She had swooned under it, and

remained for some hours in a state of unconsciousness. I found that a repetition of the operation had become necessary, but the ear was in an exquisitely sensitive condition, so that the patient could not bear the slightest touch without fainting. I dropped into the ear a few drops of a four-per-cent. solution of cocaine muriate, and in a few minutes found that I was able to syringe out the ear without any trouble.

We begin now to read of bad effects and negative results in the use of this article, which are only what we had to expect. Dr. Thompson, of Indianapolis, a careful observer, reports that he has failed to produce anæsthesia with it. Some complain that inflammation, or at least severe irritation, has followed its use. In some cases of iridectomy it has led to loss of the lens, and escape even of a considerable part of the vitreous humor. It is certain that the anæsthetic effect produced by it is limited to the tissues with which it comes in immediate contact.

Dr. Jenks: I have experimented some with cocaine, and can confirm this statement. I found that even with a five-per-cent. solution I was unable to remove the stitches in a case of perinæraphe without severe pain. The effect of the agent on mucous surfaces is prompt and most gratifying. I have employed it after operating for dilatation of the urethra, to relieve pain about the meatus, with magical effect.

Dr. Cleland: An agent of McKesson & Robbins left with me a sample of pills of cocaine muriate. I have made some experiments with them, but I have not found them of any use in the cases of whooping cough and other nervous affections in which I hoped to obtain benefit from them.

Dr. Lyons: I made an experiment the other day on myself with this remedy, with results which seem to indicate that it may have its place among therapeutic agents. I may state that I have previously tried the fluid extract and the infusion of the drug, with negative results, so far as I could determine by my sensations. I am somewhat subject to nervous headaches, which I find sometimes to yield to caffeine or guarana, but not always. Feeling one of these headaches coming on, I thought it a good opportunity to try the efficacy of cocaine. I accordingly took about a quarter of a grain of the muriate. It does not often happen with me that a headache coming on in the middle of the day passes off before night. It may have been accident, or the effect of

imagination, but in this case the headache disappeared in a short time. I took the dose about noon. Except for the disappearance of the headache, I could not see that I experienced any sensible effect from the drug during the afternoon, except that the solution produced a feeling of numbness in the throat and œsophagus. In the evening, however, I found myself sustained in the peculiar way we read about in the accounts of this drug. With no especial exhilaration, I felt somehow superior to fatigue, and continued to work until a very late hour, with an unusual sense of freedom in my mental operations. I was not rendered nervous or wakeful, as by coffee or caffeine. I simply felt as if my capacity for work were indefinitely extended. When midnight came I retired, not because I was tired, but because it was time for a reasonable man to seek repose. In my younger days this was my normal condition, but of late I have found that by 10 o'clock in the evening I become averse to a continuance of mental effort. Moreover, the effect of the drug seemed to last into the forenoon of the next day, and was not followed by any reaction. I have given this story of personal experience for the possible bearing it may have upon the indications for the use of this drug, which does not appear to act at all as an anti-spasmodic.

Dr. Noyes: I have employed cocaine with results similar to those reported by Dr. Connor. I was called to see a young child suffering with otorrhœa, accompanied with great pain. Heretofore, in such cases, I have employed aqueous extract of opium for local application. This child's ear was so sensitive that it was impossible to make any examination, or even to apply any remedy.

I gave the parents a solution of cocaine muriate, and directed them to apply a few drops to the ear when the child should fall asleep. This was done, and the next day I was told that the child had not complained any more of pain, and I found that I could easily examine the ear with the speculum. In these cases the remedy seems to do more than merely to relieve pain. It produces a blanching of the mucous membrane, and relieves the condition of irritation.

Dr. Lyons: In applying the solution to the eye in a case in which a drop of liquor ammoniæ had produced sudden congestion, I have observed, along with the anæsthetic effect, which was magical, this peculiar action on the capillary vessels. The bloodshot

membrane became in a few minutes whiter than that of the fellow eye.

Dr. Yemans: There is a very common affection that is productive of great discomfort in those afflicted with it—I refer to what is commonly called ingrowing toe-nail. A recent writer in the *Medical Age* calls attention very properly to the circumstance that the difficulty in these cases is not occasioned by the encroachment of the nail upon the soft tissues, but by an inflammatory swelling—an apparent growing upwards—of the soft tissues. Treatment has heretofore been directed generally towards restraining the growth of the nail. It has been scraped in the center; a piece of it has been split off and torn away. The more rational proceeding is to remove the soft tissues, and I have been in the habit lately of doing this, with results wholly satisfactory. A complete cure may be effected by this comparatively trifling operation in two weeks.

Dr. Noyes: This brings to mind an operation which my friend, Dr. Miller, of Providence, more than 24 years ago, showed me. He said he had a new operation for the cure of ingrowing toe-nail. He merely placed the foot squarely on a board, took a sharp gouge and mallet, and removed the outer portion of the toe irritated by the nail. There is no question that the treatment was effectual.

Dr. Connor: It seems to me remarkable that civilized and enlightened Americans put their feet habitually in stocks as bad as those with which the pagan Chinese women deform theirs. The whole theory of the construction of a modern boot is wrong. The inside of the foot is nearly a straight line from heel to toe, and boots ought to be made to accommodate the foot, not to distort it by crowding the great toe towards the centre of the foot. One cannot walk with freedom, or have any natural use of the foot as long as the fashionable boot is worn.

Dr. Yemans: It is easy to demonstrate the absurdity of our foot coverings, but gentlemen will wear fashionable pointed boots, and ladies will continue to lace—in spite of physiology.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

W. H. LONG, M. D.,
President.

Proceedings of the Wayne County Medical Society.

DETROIT, December 4th, 1884.

Dr. Yemans presented a patient, aged 36 years, who during the last six weeks has lost flesh rapidly, his usual weight being 145 pounds, present weight 120 pounds. His pulse is about 104; temperature 104° F.; respiration 30.

Dr. Wyman, by request, examined the patient and found loss of fremitus on left side, exaggeration on right. There is considerable dullness in the lower part of the left lung, but no very extensive lesion.

With such rapid pulse and respiration with high temperature, the patient will probably die suddenly of heart-clot—a very common result in such cases. He has experimented with pigeons and dogs by repeated bleeding and otherwise, to cause rapid pulse and high temperature and death from clot invariably resulted in a short time.

Some time ago he saw a case of acute tuberculosis. This patient suffered from typhoid fever, and free hemorrhage from the bowels, after which the lungs cleared up and the patient is now well.

Other members of the society examined this patient and concurred in Dr. Wyman's opinion.

Dr. Smith: This patient requires quiet and the comforts of a good home.

Dr. Long: This patient's trouble is confined principally to the lower part of the left lung. I have known negroes to die of acute phthisis in six weeks.

Dr. G. S. Smith reported this case: A maiden lady, aged 68, had rapid pulse and respiration. She wasted rapidly and died suddenly. The autopsy showed very few tubercles, atheromatous arteries, clot the size of a hen's egg in the ascending vena cava, no clot in the heart; more than an ounce of gall stones, and an ossified uterus. The uterus was sent to Ann Arbor and is possibly there now.

Dr. Smith also cited scenes at the battle of Lundy's Lane, and the circumstances of his first case of amputation of a limb on the battle field, when he was about twenty years old. The surgical appliances at that time were crude indeed, as compared with those of the present day.

Drs. Yemans, Wyman, and others cited incidents connected with surgery before the introduction of anesthetics.

DETROIT, December 18th, 1884.

Dr. Mulheron, for the committee on president's address, reported the great evils of the present medical and surgical services at hospitals and other institutions.

Dr. Lyster presented a splint for fractured leg, and exhibited the method of using it. The splint consists of a frame on which the limb rests. The splint is suspended over a pulley and permits free movement of the patient, and great facilities in dressing and inspecting the injured limb. It is fashioned somewhat after the fashion of Smith's anterior splint, and can be furnished at about \$3.50.

Dr. Clarke has used with much satisfaction Dr. Lyster's splint. The elastic tubing being very readily untied is probably no better than the old fashioned weight.

The president, on motion, appointed Drs. W. Brodie, Isaac S. Smith and George R. Richards a committee to draft suitable resolutions in regard to the death of C. C. Gray, M. D., Surgeon U. S. A.

The committee reported as follows:

WHEREAS, In the providence of God it has pleased Him to remove by death our fellow-member and professional brother, Maj. C. C. Gray, M. D., Surgeon U. S. A., from our midst, after an active service for his country, and, though not in the sere and fallen leaf, yet obliged to leave the active duties of his profession, from impaired health acquired while engaged in its duties, we hereby express our sympathy and regrets; therefore be it

Resolved, That in the death of Dr. C. C. Gray we recognize the loss of one who always, when within the reach of its call, attended its meetings and took an active interest in its deliberations and welfare.

Resolved, That we will remember with gratitude his kindly manners, his keen wit, his earnestness in promoting discussion, and his forbearance when pressed upon, toward those he might have reason to think were opposed to his interests.

Resolved, That in commemoration of his memory, this preamble and resolutions be spread on the minutes of the society, be published in the proceedings, and a copy sent to his bereaved widow.

(Signed)

WM. BRODIE,
ISAAC S. SMITH,
GEO. R. RICHARDS.

The report was unanimously adopted.

JANUARY 8th, 1885.

Dr. Hal C. Wyman, at the regular meeting of the Wayne County Medical Society this evening, read a paper on

TENOTOMY OF THE LEVATOR PROSTATÆ

As a means of relief in hypertrophy of the prostate. He claims that about one in five old men suffer from enlarged prostate, that

soon after the catheter is used as a means of relief, the patient too often falls into a typhoid condition, and dies of "catheter fever;" and that this fever is due to absorption of ferments, in consequence of rupture of the mucous membrane of the urethra.

The conclusions drawn are:

1. The tendon of the levator ani muscle unites with the central tendon of the perineum, and invests the prostate gland in such a manner that when the prostate is enlarged, force is brought to bear upon it during efforts to evacuate the bowels, which rotates the prostate upon the urethra and shuts off the flow of urine.

2. A section of the perineum and its deep fascia and central tendon will remove the force expended by the levator ani muscle, and, producing version of the prostate, will permit the muscles of the abdomen and bladder to evacuate the urine. Such a section implies tenotomy of what some anatomists call the levator prostatae muscle.

3. An operation of this character involves a breaking up of the veins and lymph spaces on the rectal and lateral aspect of the prostate; and if the wound is made to granulate from the bottom, atrophy of the prostate will follow, so that by the time the tendon of the levator prostatae has reunited, no further difficulty in micturition will be likely to ensue.

DISCUSSION.

Dr. J. J. Mulheron: This operation, if reliable, should be eminently useful. Probably more deaths in these cases result from the use of the catheter—catheter fever—than from septic poisoning without the catheter. Permitting a column of water to force open the passage, by firmly holding the glans penis, often works well. An illustrative case was cited.

Dr. C. J. Lundy: Saw a gentleman who had invented an instrument to dilate the prostatic portion of the urethra, but its usefulness was not then known.

Dr. Smith has seen quite a number of cases of enlarged prostate. An old man, some 24 years ago, was troubled, and catheter passed. The glands were hard, and of the size of a hen's egg. One week later passed catheter and washed the bladder with warm water. Six months later catheter passed, considerable pus escaped, and washed bladder with warm water. Prostate much smaller. About two years later there was great difficulty in passing catheter. There was decided spasmodic action, but by frightening the patient in

regard to a horse, the spasm relaxed and the catheter passed with ease. About a gallon of water passed and the bladder washed as before. The prostate was smaller, but the patient from this time failed.

Dr. Rouse: Theory advanced seems plausible and may be very valuable when other methods fail.

Dr. Bryan: Dr. Wyman's method seems worthy of careful trial. Some years ago, in a paper on catheterization he claimed that during inflammation of the prostate there was stasis of blood in the veins, and possibly thrombi. The passage of the catheter might break the thrombi and thus cause catheter fever.

The use of the fluid extract of ergot might induce atrophy and possibly abscess.

Dr. Noyes: Dr. Wyman's suggestions seem very plausible. He has seen many cases of rupture of the mucous membrane of the urethra without septic poisoning.

It requires knowledge and tact in many cases to pass a catheter, and he cited several very interesting and instructive cases.

Dr. Dakin knows no cure for these cases and views the operation with favor.

Dr. Yemans: About six years ago had a case of lateral lithotomy. The patient is now suffering from hypertrophy of the prostate. The catheter is probably too frequently used for relief in enlarged prostate.

Dr. Leonard: In regard to the bladder not absorbing narcotics, cited a case in which marked narcosis resulted from an over-dose of morphine being injected by mistake by a nurse.

Dr. Wyman: Enlargement of the prostate gives great leverage to the muscles and should induce great tension. The operation is only recommended when other methods fail or are inadmissible.

Adjourned.

W. H. ROUSE, M. D.,

Secretary.

C. C. YEMANS, M. D.,

President.

Owosso Academy of Medicine.

The regular meeting of this society was held in Owosso, March 5.

The president, Dr. J. N. Eldred, called the meeting to order at the usual hour. The minutes of the last meeting were read and approved.

Dr. McCormick then read a paper on "Convulsions in Children." He said that the

frequency of this phenomenon and the great variety of circumstances in which it occurred, rendered a careful investigation of the subject of the utmost importance. The predominance of the spinal over the cerebral system in early life was given as the reason of the frequency of their occurrence in childhood. In proportion as the brain increases in size, and its higher functions are displayed, the less frequently do convulsions occur. Nothnagel has demonstrated that there is a small circumscribed spot on the floor of the fourth ventricle of the brain, to which if irritation be applied, a convulsion is sure to result.

Convulsions may be produced by irritation of the *channels of conduction* and of *motor centres* of the *spinal cord*, or they may be produced by irritation of the *conducting paths* and *central apparatus of the brain*. A predisposition to convulsions no doubt exists in many families, and may be inherited or acquired.

The convulsive seizure is frequently due to the introduction of foreign substances into the blood, as in uræmia, narcotic poisoning, or from the infection of miasmatic or contagious diseases, as in scarlet fever, measles, small-pox, etc. Most frequently, however, convulsions are due to irritative excitement, transmitted from the peripheral nerves to the medulla oblongata. To this class belong teething, irritation of the intestinal canal by worms or constipation, over-distension of the stomach, the sudden drying up of eruptions, etc., etc. When death from convulsions occurs, it is due to asthenia, spasm of the glottis, intense cerebral congestion and coma.

The convulsion due to peripheral irritation has usually a favorable termination; those to central trouble, or coming on in the course of some acute disease, as whooping-cough, scarlet fever, etc., etc., the prognosis is much more grave. He then described the character of a fit, and the best method of managing a case during the seizure.

TREATMENT.

Ascertain the cause of the convulsion, and, if possible, remove it.

Put the child into a hot bath, or better still, a hot bath into which a handful of mustard has been thrown. Have the room quiet, and a plentiful supply of fresh air.

If the head be hot, face flushed, fontanelle prominent and pulse full, keep the head cool by frequently sponging with cool water and vinegar.

If, however, the head be cool, face pale and fontanelle depressed, give stimulants in addition to the warm bath.

When the convulsive seizure is due to high temperature, as in the onset of some of the eruptive fevers or pneumonia, much good results from the rapid but careful administration of *veratrum viride*, thus quieting the circulation and reducing the temperature.

For the purpose of allaying nervous irritability, a mixture of bromide of potassium and chloral hydrate should be injected per rectum.

For this purpose some physicians are in the habit of using opium, belladonna, hyoscyamus, etc., but none, I think, operate so kindly and well as the chloral and bromide mixture. If the gums be swollen and tumid, they should be freely scarified.

If the convulsion be due to mere flatus, and the belly tense and tympanitic an injection of *Asafetida*, and gentle friction, together with the warm bath will usually suffice to dispel it.

If due to indigestible food, give an emetic of ipecac, and later a good sharp purge. This, in general terms, seems to me to be the best management of a case during the convulsive movement. The history of the case should be carefully studied and each individual case treated as the indications seem to demand.

The paper was discussed by Drs. Perkins, Wark, Parkill, Hume, Connor and Eldred.

HYDROCHLORATE OF COCAINE.

Dr. Leartus Connor, of Detroit, then read a paper on "Hydrochlorate of Cocaine," the new anæsthetic. He began by giving an account of how it was first brought to the notice of the medical profession at the International Ophthalmological Association by Koller, a physician at Vienna, and to the notice of the American medical profession by a report published by Dr. Henry Noyes in the *Medical Record*. Almost simultaneously all over the American continent thereafter experiments and observations with this anæsthetic began, and they have been vigorously pushed up to the present time.

Cocaine is the alkaloid of the leaves of *Erythroxylon coca*, a shrub growing wild and also extensively cultivated in South America, especially in Peru and Bolivia. There are four salts in general use made from it, viz: the hydrochlorate, citrate, salicylate and oleate. The hydrochlorate is mostly used by ophthalmologists, and the citrate by dent-

ists. The doctor here exhibited a case containing samples of these salts.

He said that in his work as a specialist he had used this new drug in a vast variety of operations upon the eye and ear, and in every case except in six (which he enumerated) it gave him unbounded satisfaction. The ill-results following its use in those six cases were due more perhaps to the lack of knowledge on his part of how best to apply the agent, than to the anæsthetic itself.

A few drops of a four-per-cent. solution of this drug instilled into the conjunctival *cul de sac* would at the expiration of a few minutes produce almost complete insensibility of the surface of the eyeball, the pupil would be dilated, yet not so as to interfere with vision.

The anæsthetic effects are merely local, and result from the paralyzing action of the cocaine on the nerve-cells with which it comes in contact. He mentioned several operations such as removing foreign bodies from the cornea, operating for strabismus or pterygium, in fact almost any of the various operations on the eyeball, inner surface of the eyelid or on the tear-passages were performed painlessly by dropping cocaine into the eye. For deeper operations, such as extracting cataract, iridectomies or removal of the eyeball, he recommended injecting the solution by means of a hypodermic syringe. In cases of acute coryza, the stuffing of the nose resulting from the swollen mucous membrane covering the nasal septum and turbinated bones is almost instantly relieved by an application of cocaine.

He gave a brief and clear account of several operations in ophthalmic, nasal, pharyngeal and aural surgery in which he had employed cocaine as the anæsthetic, and with entirely satisfactory results.

It is used in extracting teeth and other operations in dental surgery, but must be so applied as to come in contact with the nerves supplying the part in order to render the operation painless.

This anæsthetic is yet in its early infancy and its applicability to numerous varied conditions is yet imperfectly understood, but looked at without the glamour of a very excusable enthusiasm the drug is certainly a most valuable addition to the resources of the ophthalmic surgeon.

The doctor's paper was listened to with very marked interest, and at its conclusion he was plied with numerous questions, which he answered very pleasantly and clearly.

On motion a vote of thanks was tendered

Dr. Connor for his valuable paper, and he was elected an honorary member of the Academy.

The chair appointed Dr. W. C. Hume to prepare a paper for the next meeting.

On motion the Academy adjourned.

C. McCORMICK,
Secretary.

Michigan State Board of Health.

Reported for the DETROIT LANCET:

At the quarterly meeting of the State Board of Health of Michigan, held January 13, 1885, at its office in Lansing, the following named members were present: Drs. Avery, Lyster, Hazlewood, Tyler and Baker.

The secretary mentioned that during the quarter a successful sanitary convention had been held in East Saginaw, and that steps had been taken by citizens of Lansing to hold a sanitary convention in Lansing, in March next (March 19 and 20, 1885). The secretary had attended, as delegate of the Board, two meetings of the conference of State Boards of Health—one in St. Louis, Mo., in October, and one in Washington, D. C., in December. In the former he was chairman of the committee which prepared the report on practical means of preventing the introduction and spread of cholera in this country, which was adopted by the conference, and also by the American Public Health Association. It has been widely published. In the conference at Washington, he read a report on the sanitary condition of Michigan, and preparations made for meeting the threatened invasion by cholera, and was a member of the committee on best methods of action by the national government to prevent the introduction and spread of cholera.

Bound volumes of the annual report for the year 1883 had been received from the printers, and this and other documents have been mailed to all health officers in the State, to clerks of cities and of villages, and to mayors of cities and presidents of villages. A large number of circulars, in English and in foreign languages, on best means of restricting and preventing communicable diseases, had been sent to health officers where contagious diseases were present. A large number of annual reports, reprints and circulars have been sent to persons interested in sanitary affairs. Blanks for reports of diseases dangerous to public health, with circulars of instructions, were sent to all health officers of cities, villages and townships in the State to the number of 1,390. Another set for report-

ing communicable diseases in 1884, was sent to the clerks of cities, villages and townships in Michigan. Two copies of a circular relative to diseases in Michigan in the year 1884, and stamped envelope for reply, have been sent to about one hundred and eighty physicians in Michigan who are regular correspondents of the Board.

The secretary also reported that since Oct. 7 there had been four outbreaks of cheese-poisoning in Michigan—at Jackson, Homer, Flushing, and Lansing. During the past quarter there had been three cases of small-pox, with one death, at South Boardman, Kalkaska county, the infection of which is supposed to have been brought from Denver, Colorado.

Many outbreaks of diphtheria had been reported during the quarter. During the serious outbreak in Kalamazoo, from July 20 to December 20, 1884, over 260 cases and 54 deaths from diphtheria were reported to the Kalamazoo board of health. The health officer of Kalamazoo reported, December 22, 1884, that the epidemic in that city appeared to be nearly or quite at an end; but since that report, *and following the thaw*, there was a sudden increase of diphtheria in Kalamazoo, twenty cases being reported in one week. New cases of diphtheria continue to be reported from Detroit at the rate of 35 to 45 per week. The total number of cases in Detroit for the year 1882, as collected from the weekly reports of the health officer, is over 1,500, and the number of deaths for the same period is over 340.

The secretary's report of the conference of State Boards of Health, held at St. Louis, in October, and at Washington, in December, was ordered to be printed in the annual report for 1885.

A letter from a gentleman in Bronson, in regard to sickness in his family, supposed to be due to arsenic in the wall-paper of the house, was read by the secretary, and specimens of the paper were shown. The paper was sent to Prof. Vaughan, of Ann Arbor, to have it tested for arsenic.

Dr. Avery, as chairman of the special committee appointed at the request of the State Board of Corrections and Charities, to examine the State House of Correction at Ionia, read his report. It was accepted and ordered printed in the Annual Report for 1885, and copies were ordered sent to the committee on Public Health of the legislature, and to the Board of Corrections and Charities. The

committee found the sewerage, plumbing, and ventilation in bad condition. The sewer leading from that part of the building where the offices are situated empties into the basement instead of into the catch-basin near the barn—that is, it empties at the wrong end. There is no provision for flushing the sewer except by means of hose and hydrant. The sewer has become filled up with garbage and refuse. A new sewer should be laid, leading from the basement of the office building to the main sewer, for which there is ample fall. The plumbing connecting the kitchen, wash-room, bath-room, and water-closets with this sewer is in wretched condition, and should be replaced with new, with properly ventilated soil-pipes and approved traps. The committee consider the shafts designed to ventilate the cells as an admirable arrangement for the equal distribution of poisonous gases through all the cells, but can hardly call it ventilation. In the shoe shops an attempt had been made to carry out the recommendations of a former committee of this Board, by placing steam coils in the few shafts put in when the shops were built; but the coils were not heated, and so were of no aid to ventilation. No attempt to ventilate the other shops had ever been made. In the cigar shop the odor of tobacco and foul air was simply intolerable; the committee noted the pallid faces of nearly all of the seventy-five or one hundred young men and boys in this room. The water-closet of each shop has defective plumbing, and all are unventilated, so that foul odors arising from them are permitted to enter the shops. The ventilating flues leading from the hospital to the attic are imperfect and are not heated. The committee recommended the prompt remedying of these evils by the employment of a competent architect to make plans and specifications, and to superintend the details of the work.

Dr. Jerome Walker's text-book, "Anatomy, Physiology, and Hygiene," was approved by the Board, according to law, for use in the schools of Michigan.

The following named text-books were conditionally approved under a resolution of the Board passed July 8, 1884, which stated that because of errors and omissions, until such errors should be corrected, the books named could not receive the entire approval of the Board:

"Hooker's New Physiology, Designed as a Text-book for Institutions of Learning. By Worthington Hooker, M. D. Revised by J.

A. Sewall, M. D. With a chapter on Alcohol and Narcotics. 1884."

"A First Book in Physiology, for the use of Schools. An Introduction to the Larger Work by the same Author. By Worthington Hooker, M. D."

Health in Michigan.

January, 1885.

For the month of January, 1885, compared with the preceding month, the reports indicate that pneumonia, erysipelas, neuralgia, tonsillitis, influenza, and consumption of lungs increased, and that diarrhœa, typho-malarial fever, and remittent fever decreased in prevalence.

Compared with the average for the month of January in the seven years, 1879-85, neuralgia and erysipelas were more prevalent, and pneumonia, diphtheria, intermittent fever, measles, dysentery, remittent fever, and scarlet fever were less prevalent in the month of January, 1885.

For the month of January, 1885, compared with the average of corresponding months for the seven years, 1879-85, the temperature was lower, the absolute humidity and the day and the night ozone were less, and the relative humidity was more.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of January, 1885, at 42 places, namely: Attica, Boardman, Bloomingdale, Charlevoix, Chocolay tp., Dansville, Detroit, Delhi, Delhi tp., East Saginaw, Gaines, Gaines tp., Grand Rapids, Genoa, Harrisville, Handy, Hancock, Hastings, Hudson, Ingham tp., Imlay, Ishpeming, Kalamazoo, Lyons, Negaunee, Novi, Novi tp., Orleans, Oscoda, Oshtemo tp., Owosso, Pierson tp., Plymouth, Port Crescent, Quincy, South Boardman, Sand Beach, Thornville, Taylor tp., Watervliet, White Oak, and Wyandotte. Scarlet fever at 37 places: Albion, Algonac, Bellaire, Belvidere tp., Clam Lake tp., Charlevoix, Detroit, East Saginaw, Fawn River, Grand Rapids, Genesee, Highland, Homer, Ida, Kalamazoo, Leeland tp., Lowell, Manistee, Muskegon, Negaunee, North Muskegon, North Lansing, Pontiac, Pierson, Pierson tp., Quincy, Sault Ste. Marie, St. Louis, South Haven, Sears, Sheridan, Thornville, Watervliet, Wheatfield, Whitehall, and Westphalia. Measles at 4 places: Detroit, East Saginaw, Grand Rapids, and Hopkins tp. Small-pox at South Boardman.

For the month of February, 1885, com-

pared with the preceding month, the reports indicated that pneumonia and inflammation of kidneys increased, and that intermittent fever and tonsillitis decreased in prevalence.

Compared with the average for the month of February in the seven years, 1879-85, erysipelas and neuralgia were more prevalent, and intermittent fever, diphtheria, remittent fever, measles and scarlet fever were less prevalent in February, 1885.

For the month of February, 1885, compared with the average of corresponding months for the seven years, 1879-85, the temperature was considerably lower, the absolute humidity and the day and the night ozone were less, and the relative humidity was more.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of February, 1885, at 36 places, namely: Albion, Alcona, Cadillac, Cedar Springs, Dexter, Detroit, East Saginaw, Grand Rapids, Harrisville, Holly, Hope tp., Ishpeming, Ithaca, Ingham tp., Kalamazoo, Leelanaw, Lexington, Marquette, Maple Valley, Muskegon, Muskegon tp., New Haven tp., North Star, Novi tp., North Muskegon, Otsego, Oshtemo, Oshtemo tp., Owosso, Pierson, Pierson tp., Port Crescent, South Bay City, Taylor, Winfield, Wyandotte. Scarlet fever at 28 places: Adrian, Albion, Berlin tp., Burchville, Chester, Charlevoix, Detroit, Dover, Dundee, East Saginaw, East Tawas, Forest tp., Grand Haven, Grand Rapids, Homer, Kalamazoo, Kearney, Leelanaw tp., Lowell, Lindon, Manistee, North Muskegon, Novi, Pentwater, Power tp., Pierson, Sheridan tp., South Haven, Vernon tp. Measles at East Saginaw, Detroit, Grand Rapids, Hopkins tp. Small-pox at East Saginaw and South Boardman.

HENRY B. BAKER,
Secretary.

LANSING, Mich.

Barry and Eaton Counties Medical Society.

CHARLOTTE, January 27, 1885.

The society met in the parlors of the Sherman house, Dr. A. Knight, of Eaton Rapids, the president, occupying the chair.

Present: Drs. Knight, Patterson, Allen, Adams, Walker, Johnston, Conley, Weaver, Merritt, and Young.

Minutes of last meeting read and approved.

Dr. P. D. Patterson, of Charlotte, presented the following case to the society:

The patient was a boy, five years of age. The doctor had seen him first about the first of December, 1884, although he had been complaining for some time previously, and had been receiving some treatment for worms, which were supposed to be the cause of his illness. At that time he discovered a quite distinct enlargement of the epigastric region. This has been gradually increasing. There is pain or tenderness on palpating the enlargement, although he complains of a pain in the right hypochondriac region. The appetite continues about normal, but he has frequent attacks of nausea. The stools and urine are normal. Although the whole abdomen is now very much distended and gives a dull sound on percussion, there is quite a distinct prominence in the right side, which is quite uneven, and somewhat nodular.

The case was examined by most of the members. In regard to the question of diagnosis, there was quite a diversity of opinions expressed.

The doctor was requested to make a report upon this case at our next meeting.

Dr. A. W. Adams reported a case of bilateral laceration of the cervix uteri, of several years' duration, for the relief of which he had operated on the second day of the present month. He used no anæsthetic during the operation. The lacerated surfaces were pared in the usual manner, and brought together by silk sutures. The result was entirely satisfactory, the sutures being removed on the twelfth day.

Dr. G. W. Lowry, of Hastings, then read a very interesting paper on "Hysteria and Hystero-Epilepsy."

The society adjourned, to meet in Nashville on the 30th day of April next.

W. H. YOUNG, Secretary.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The New Life of the *Index Medicus*.

In the last issue of the DETROIT LANCET we called attention to the fact that the *Index Medicus* had died—its publishers and editors giving up the enterprise as a hopeless one. It gives us great pleasure to now state that the enterprise has been rejuvenated, and started upon a new career of honor and usefulness.

The following notices from the editors and former publisher fully explain the details of the new arrangements:

"We take pleasure in announcing that Mr. George S. Davis, of Detroit, has undertaken to continue the publication of the *Index Medicus*, on the same general plan; and with the same regard to typographical accuracy and finish, as heretofore.

On account of the delay required to perfect this arrangement, the first number of the journal for the current year will comprise the literature of January, February and March, after which it will appear monthly as usual.

At the end of the year, in addition to the usual annual index of names, subscribers will be furnished with an index of subjects to the volume.

So many expressions of regret and urgent remonstrances in regard to the threatened discontinuance of the *Index Medicus* have been received, that we think we may venture to congratulate the profession on Mr. Davis' public spirited determination to carry on the enterprise in spite of the fact that thus far it has not been pecuniarily remunerative.

It is requested that all exchanges, and books and pamphlets for notice, be sent to the *Index Medicus*, Washington, D. C.

JOHN S. BILLINGS, M. D.

ROBERT FLETCHER, M. D.

WASHINGTON, D. C., March 4, 1884.

[FROM THE FORMER PUBLISHER.]

To the Subscribers of the *Index Medicus*:

Mr. George S. Davis, medical publisher, of Detroit, Michigan, having undertaken, with the full approval of Drs. Billings and Fletcher, to continue the *Index Medicus* as his own enterprise, the undersigned, as the recent publisher of that journal, gives notice that the goodwill has been transferred by Mrs. F. Leypoldt, administratrix of the estate of Frederick Leypoldt, to Mr. George S. Davis, and a continuance of the cordial support given by so many of the faculty to the publication during Mr. Leypoldt's lifetime is asked for the enterprise of Mr. Davis, in the hope that his relations with the medical profession will enable him to obtain sufficient further support to make the enterprise self-sustaining.

R. R. BOWKER.

NEW YORK, March 4, 1885.

The importance of this work to all real medical scholars, young or old, cannot be too

highly estimated. As the several volumes stand upon our library shelves, they furnish a complete index to all the medical journals that have been issued during the years that they cover. To one who has undertaken the task of looking over all the medical journals in order to get some short article, the advantage of this index will be at once apparent. Formerly it required days to ascertain whether said article was in the journals, but by the aid of the index, five minutes will fully settle the question. Farther, if it is desired to learn all the articles which have been written during the year upon a certain subject, a very few moments will give us the complete list, also page and date where we may find these several articles. Again, if we desire to ascertain all the contributions of any one man, the information is ready at our hand.

As a whole this index catalogue is the supplement of the index catalogue of the library of the Surgeon-General's office at Washington. Where this leaves the work of indexing medical literature, the *Index Medicus* begins. Taken together these volumes will index all medical libraries in the United States with slight exceptions. That must be a very small library which can be kept indexed as to the articles and authors for the sum of \$10.00 per year. Besides, most men cannot, for lack of time, or lack of knowledge, index their own libraries. This work is a specialty in itself. Hence all would contribute to their own advantage by at once subscribing to this publication.

A new feature will be added to the work, viz: at the end of each volume there will be a subject index of the entire volume. This has not been introduced in former volumes owing to its expense. But the present publisher with his accustomed liberality and enterprise, undertakes the work knowing full well the past bad financial record of the publication, and the additional burden of this new feature.

The cost of this publication is \$10.00 a year. This at once precludes the possibility of the young practitioner devoid of capital from subscribing for the work. But it does not interfere with the subscriptions of all men in middle life of well established incomes. Nor does it interfere with such younger men of scholarly tastes as have other funds than their professional incomes upon which to depend. Above all, it does not interfere with the ability of every medical society, local, state or national, from taking one or more copies. If even this latter list should sub-

scribe for this work, its permanance would be at once assured. If to this was added the subscriptions of the well-to-do-doctors of scholarly tastes, the list would be large and creditable to all concerned. Then, what is of far more importance, the possibilities of American medical scholarship would be vastly elevated. This is the end aimed at by the editors, publisher, and all friends of the enterprise. They confidently appeal to all lovers of the medical profession to lend them a helping hand.

In order that this may be most effective, let every reader of this article at once set about doing all that lies in his power to add one or more to the list of subscribers to the *Index Medicus*.

The Michigan State Sanitary Convention.

Two or more of these are held yearly by the Michigan State Board of Health, in conjunction with the persons interested in such matters, at the several cities of Michigan. The last of these conventions was held at Lansing March 19th and 20th.

At the opening of the session, the large audience room of the Central Methodist church was well filled with an attentive audience.

It was presided over by one of the vice-presidents, Prof. T. C. Abbot, of the Agricultural College. Mayor Donovan made an address of welcome, in which he called attention to the fact that the theories of scientific men were being constantly brought into more intimate relations to practical life and so were becoming of greater immediate value to the people.

Dr. John Avary presented, as President of the State Board of Health, the nature of the work of the Board. He said that the poor man's health is his capital, and his daily wages for his labor, its interest. To protect this capital is as much the duty of the State as to protect the rights of a railroad corporation. The State Board of Health has been founded upon this principle. The board acted as a central station from which flashed over the state danger signals. He dwelt at length upon the duties and relations of the state and local boards of health.

Prof. Abbot, after reading a letter of regret from the Hon. O. M. Barnes at his inability to be present, spoke at length of the importance of the guidance of sanitary regulations, and for encouragement of the half-hearted ones, presented some of the results already achieved.

Dr. Leartus Connor made an address upon light and the common sources of danger to human vision. After showing by large charts the general formation of the eye and its appendages and relations to the nervous system in general and the entire body, he dwelt at some length upon some of the agencies which greatly endanger human vision, and pointed out the changes in habits and modes of life which would remove many and serious dangers to the health of the eyes.

A paper on "The Hygiene of the Eye" was read by Dr. Harret Brooks, very interesting in its style and manner of presentation. The entire subject was then discussed by many members of the convention.

Prof. Howell, Superintendent of the Lansing High Schools, read an able paper advocating shorter sessions of the schools, and the abolition of recesses. His arguments are weighty, but they did not convince us that his remedy was a suitable one. We believe in shorter sessions for the smaller scholars, and so short that they would not need any recess. As children get older the length of the session might be proportionately increased. If the adoption of shorter school sessions with no recesses shall lead up to this general end, we should be satisfied to see it tried. Our judgment is that small children are confined entirely too long at one time now, and too many times during the single day.

The Rev. Mr. Sample presented a very able paper upon the relations of health to morality and religion. The speaker believed that the connections between body and soul were so intimate that no one could draw the mystic line rightly severing one from the other. Man, physical, mental and spiritual is in a certain sense a trinity in unity. "Check his circulation and he thinks wildly. Impair his secretions and his moral sense becomes dulled or depraved, and hope, love and faith reel."

There is a swift and close sympathy between the lowest bass of physical condition and the highest soprano of spiritual aspirations, and the relations between private and public health and morality and religion must be very intimate and very important.

Health is the basis or at least a great aid to many of the personal virtues, and numerous diseases are the foes and often destroyers of the goodnesses and graces of those who desire to lead noble lives.

There is a new materialism which proclaims

the gospel of the mutual helpfulness of soul and body.

Prolong human life and place it on a higher plane of physical perfection, and you grant fulness and tone to existence, purify its moral climate, ennoble its days, and strengthen the cords of human brotherhood. The common people can aid and encourage the workers in sanitary and hygienic reform, and we can outgrow all those old, foolish superstitions about diseases which are potent enemies to sanitary measures. The speaker hoped that the day would come when the doctor's status would be changed, and instead of making most of his money when disease was most prevalent, he would be salaried the same as ministers are.

The general beneficial effects of sanitary labors, and reforms upon morality and religion were strongly pointed out, and the speaker concluded by stating that with health of body, wholesomeness of surroundings, and higher tone imparted to all life, the spirit of holiness would not be "a distant star in the zodiac of old traditions," but a present comforter and guide.

Dr. J. A. Post presented a strong and earnest plea for village hospitals. These were for the benefit of such as had no home in which to be cared for when they were sick. These he showed could be better cared for in a little hospital than in poor houses, and at no greater expense. He presented plans for the organization of such a hospital especially adapted to the needs of Lansing.

Dr. J. H. Walling read a very valuable paper upon "The death-rate of Lansing—principal causes of death, and suggestions for the lessening of sickness and death." Among the causes specified were the use of impure water, filth, poverty, intemperance, and ignorance of sanitary and developmental laws. Many valuable suggestions were made, most helpful to such as will heed them.

Valuable papers were read by Mr. H. D. Bartholomew, and Mr. Wm. Appleton, city engineer, on "The sewerage and drainage of Lansing."

A general discussion followed the reading of each of these papers.

Mr. Wm. Appleyard, and Dr. Hemenway, of Kalamazoo, read papers upon ventilating, both very instructive, and provocative of a good discussion.

The last papers of the session were by Dr. Geo. E. Ranney, and Mr. Chester B. Davis, of Chicago. The first of these discussed the relation of the water supply of Lansing to the

sickness of that city. The latter treated of the general subject of water supply. Both were discussed, and drew forth marked attention to the important topics.

Governor Alger was able to be present and make a short speech, indicating his approval of the objects of the convention.

We have thus, in abstract, given the general outlines of this particular convention, in the hope that it will stimulate others in other states to go and do likewise. It is only by getting with the people and talking to them and discussing with them these questions, that they can be made to at all comprehend the laws of health, and be led to have some proper regard for the laws under whose sway life and health comes to each.

The Journal of the American Medical Association.

In spite of great and numerous obstacles, this journal has held on its course in such a way as to indicate great and increasing success. Its veteran editor reiterates his determination not to continue his work after the end of the present year. In late issues he has made public some of the facts respecting the results already attained by the journal.

There seems to be great misconception, on the part of a few, as to the ends of the journal and the means at its command to reach these ends. These few thought that a journal could be started on the meagre income of the association, equal to any of the great weeklies which have been years, some of them twenty years, in reaching their present positions. It is forgotten also that all of these journals sunk large amounts of money before they became the paying enterprises they are at present. It is also forgotten that all of them had large amounts of capital at their disposal with which to develop their work, and tide over the time needful to make them self-supporting.

But to the facts given by Dr. Davis. The journal began publication July, 1883, with a list of 2,500 members and subscribers. On March, 1885, it had 3,887 members and subscribers. Adding the numbers sent out as exchanges, etc., the actual circulation is 4,007 weekly. The *British Medical Journal* began twenty years ago, with a circulation of about 2,000, and it now has 12,000. If the *Journal of the American Medical Association* continues to increase for twenty years as it has increased since it first started, it will have at the end of twenty years, a circulation of

15,000 weekly, far in advance of the British. But our own judgment is that, if the proper man is kept at the management of this journal, it will surpass any known medical journal of a legitimate sort in its circulation. Of the contents of the *Journal*, it must be admitted that, at least, it has presented the papers and discussions as given at the annual meeting sooner and in better shape than they were given in the old way. Besides, a vast amount of other matter is weekly given to the readers of the *Journal*. As funds increase more and better matter can be afforded, and will undoubtedly be given.

Again, as to the financial success of the *Journal* enterprise. Unless this makes a proper showing it must be a failure, as the Association has no reserve funds upon which to draw, to cover deficits.

The average income of the Association for the six years preceding the establishment of the *Journal* was \$5,008.00. During the first year of publication of the *Journal* the actual income was over \$16,000. There is still uncollected of bills, contracted during the first year, enough to make the income of the *Journal* for the first year of its existence over \$18,000. The total amount expended during the first year was something more than \$16,000. Thus, by the management of the editor, Dr. Davis, the receipts were made to balance the expenditures. We question very much whether any one of Dr. Davis' critics could make as good a showing, all around. Certainly the conduct of the *Journal* has been a safe one for the Association, for the directors, and for the medical profession. For the year ending June 31, 1885, Dr. Davis shows that the receipts of the *Journal* will in round numbers fall not far from \$21,000. This will pay for the increased expenditures, and afford the Association \$2,000 for its expenses and still have a surplus of \$2,000. This is certainly a most satisfactory showing for the second year of the *Journal's* publication. We again remark that this is a safe showing financially, as far as the Association and Board of Trustees are concerned. It must also be remembered that the past year has been one of great financial stringency, in which doctors as well as other people have been compelled to economize, even in their medical journals.

If only from year to year we can witness such a growth as the first two years exhibit, the future of the *Journal* is safe. The first principle of its conduct should be safety in its financial management. The Association

cannot stand having the *Journal* run it in debt. The trustees, and editor and manager of the *Journal* have ever borne this in mind, and so the expenses of the *Journal* have been made to come within their means. They could have made a better journal, but it would have run the Association in debt, and so injured, if not ruined the enterprise.

A word about the management of a medical journal. Those who have no practical experience in it are the most certain that they can succeed in it better than those now engaged in it. We wish it were possible for every member of the American Medical Association to have personal experience in this line at his own expense, and we hazard nothing in the assertion that each would then admit that the management of the Association journal has thus far been a great success.

Who the successor of Dr. Davis may be, it is impossible to say, but this we know, there never will be another editor with more self-sacrificing devotion to its interests and those of the entire Association and the medical profession at large. Nor can there be a safer one. For ourselves we greatly regret that he has determined to lay aside the duties of this work, as, all in all, we shall never see his like again.

The Michigan State Board of Correction and Charities.

This board has a general oversight of the state institutions for correction and charity. It has done its work so well as to awaken opposition, on the part of some whose "gods" have been endangered. Hence the effort now being made to have this board abolished. It could never be abolished if only its work, and the results of the same were brought to the consciousness of the people. As a Board it draws no salary, the expense being limited to a secretary and the traveling expenses of the members while away attending to the duties of the board. The work of the board is advisory wholly. After convincing itself that certain changes should be made, it advises those directly connected with the institution in question as to the best course to pursue in the matter. If it heeds the admonition, all is well, and the Board's duties are at an end. But if the authorities should refuse to attend to the matter the Board gets other evidence and presents this in a stronger light if possible. This failing, it resorts to the local papers read by the constituents of the stubborn authorities. Here by vigorous pre-

sentations of the matter it awakens a proper public sentiment. This accomplished, the abuse is at once removed. Better than all, the people of this section have been educated in sanitary matters, in a most practical manner. The value of this education in health matters cannot be too highly valued. Much of this work has been done by the board in question.

We are led to these remarks by the adverse legislation now seeking to annihilate this board. In its relations this board is doing much real sanitary work, greatly needed.

Lying before us is a paper by Levi L. Barbour, Esq., a member of this Board, upon the Jails of Michigan. Till we read this paper we did not suppose that so much barbarism could exist in our state.

Having visited many of these jails, Mr. Barbour says: "At Ann Arbor, Jackson, Alpena, Pontiac, Flint, Saginaw, Tawas, and some other places, the jails are so vile and unwholesome that they ought not to be inhabited by a human being for a single day. Most of them are damp, infested with vermin, with filthy beds, floors and walls, and cannot but breed disease and degeneration, enforce habits of uncleanness, and from lack of any provision for labor or exercise, root still deeper the demoralizing love of idleness."

As a sample of these jails, we quote respecting the one at Ann Arbor. This town is the seat of a great university, with its spacious laboratories, vast museums, and noble libraries, the centre of learning and culture. Yet on the threshold of the University is this jail thirty-nine years old, infected with all kinds of filth and foul odors, and infested with rats, bugs, and all accompanying vermin. The actual state of things has been laid before the people of this wealthy county, and it refuses to vote the funds to build a proper jail. All this while the State has spent many hundreds of thousands of dollars in building and maintaining the University and State Normal School.

In fact so extreme is the parsimony that the Board of County Supervisors actually objected to a small bill of the sheriff for fresh straw. But the State Board of Health examined the real state of things and made a report, part of which is as follows: "The foul air, as the door was opened leading to prisoners, was so offensive as to be almost intolerable. The water-closet, from one corner of the prisoners' quarters, opened directly into the general corridor. This water-closet was most ingeniously arranged to produce the

worst sort of sanitary conditions. From the bottom of the shallow vault a sewer-pipe leads to the bank of a creek a few rods distant from the rear of the jail. The end of the sewer-pipe next to the creek terminates about two feet above the surface of the water. Hence in winter the outlet becomes obstructed with frozen excrement, and chokes the sewer. When the vault becomes filled, the outlet is thawed out and the accumulation withdrawn. The sheriff remarked that once when this was being done, the man employed to remove the accumulation, built a fire at the outlet of the sewer to thaw it out. On returning after an absence of some hours, he found the prisoners' quarters full of smoke, and the jailer found the prisoners nearly suffocated with the smoke which had entered through the sewer-pipe. The only regular means for the supply of pure air to the prisoners was through this same sewer-pipe by way of the filthy vault into the corridors. The ventilation of the women's quarters was through the same sewer pipe and the men's privy vault." All this in the "Athens" of the west. Surely the people of that county need to be taught sanitary lessons. But this is simply a sample of what exists widely all over the state. We have quoted it as one of the dark matters in sanitary progress, and one that requires attention by all lovers of the human race.

What Should Be the Relation of Literary to Medical Colleges?

Personally we should answer, no person should be admitted to a medical college who had not first graduated at a reputable literary college. We hazard nothing in the affirmation that only by a discipline such as this can a mind be trained to do its best work in the study or practice of medicine.

But we intend to quote from the Professor of Physiology and Geology in the Ohio Wesleyan University (*Journal of American Medical Association*) some points in a recent address. He says that from a personal friend of his, a member of the Illinois State Board of Health, he has learned much of the inside view of medical colleges. In the grading of medical colleges by the Illinois Board, there are but ten first class medical colleges in the United States. Not one of these institutions is located in Ohio. He does not say the same of Michigan, but we fear that the same is true there. By a presentation of facts he reaches the conclusion that the medical schools of Ohio must finally

require of those seeking to enter upon their courses of instruction, a diploma from some recognized college or scientific school. He urges that the medical schools step at once upon this plain course, rather than wait a couple of decades before so doing. He shows most conclusively that it is impossible to study intelligently physiology without the advantages of a college education. He assumes that the other branches of a medical course require as much culture as that of physiology. In this assumption he is undoubtedly correct. Such a union of literary and medical colleges as will make the former a preparatory school for the latter, is most earnestly to be desired. A well-rounded culture is imperative for the best work of the physician, if for no other professional man. And yet it is true that in most of our American universities—yes, in all of them—a man can gain admittance to the medical departments, when he would be rejected should he attempt to enter the literary department. The refuse material, as regards mental training, is rejected by the literary and scientific schools, and sent over to the medical school. Here is to be found every grade of the "uncultured." Good fellows most of them are, no doubt, but entering upon a most difficult and responsible calling, utterly without that training of mind which shall enable them to be rounded men and physicians in the best sense of the term. The medical profession has endured an immense amount of padding from this source, and still the torrent rolls in upon it—*vide* the records of the scores of so-called medical schools.

Prof. Nelson gives some encouraging facts as to the increased preference of the graduates of the colleges for medical studies. Thus, of the first five hundred, six per cent. entered the medical profession; of the next two hundred, nine per cent. became physicians; of the next hundred, twelve per cent. chose the same calling.

Another influence is at work to induce many to enter upon a full literary training before beginning the study of medicine, viz., the greater success of college graduates in their studies. Thus the honors and prizes fall easily to them. Thus from one class eight young men begin the study of medicine, and attend five different colleges in four different states. At graduation six of these eight obtain positions as internes in five different hospitals. What is true of these is true of larger numbers. A trained and cultured mind makes its own success.

The Thirty-Sixth Annual Meeting of the American Medical Association.

This meeting will be held in New Orleans during April 28th and the three following days. It is many years since a meeting of the association has been held so far south. Hence on many accounts it is desirable that there be a full attendance. From the names of the local committee of arrangements there is every reason to suppose that no effort will be spared to render the accommodation of members as pleasant as possible. Every society should send a full quota of delegates.

Members expecting to read papers, must forward the same to the chairman of the committee of arrangements at least one month previous to the meeting. The chairman of this committee is Dr. Samuel D. Logan, New Orleans, La. The paper must not exceed twenty minutes in length.

An amendment to the constitution is to be acted upon to the effect that hereafter no person shall be admitted to membership in the association who is a graduate of a medical college where literary education is not required for graduation. The credentials of delegates must designate their medical college, and when graduated. This is certainly an important move. We do not think that it would be fair to make this rule apply to such as have already graduated, but it might be made to apply to all who should graduate after the year following the passage of the amendment. Of course due notice of this intent should be published far and wide so as to reach all prospective medical students. In its present state it is likely to be scarcely more than a farce at best. It would be interesting to ascertain how many of the delegates and members of the association were actual graduates of literary colleges.

An amendment to the by-laws is to be acted on, giving to each section the power to nominate its own chairman and secretary. An other amendment proposes to divide the section of ophthalmology, etc., into two sections, one to include simply ophthalmology and the other otology, rhinology, and laryngology.

This last seems to us unwise, as it has not been the case thus far that more material was offered of a good character to occupy the time of more than one section. But perhaps if the division be made, more material will be offered.

The meeting will be an important one, and its proper management will redound to the great advancement of the interests of American medicine.

The railroad rates are so low that all can afford to attend. The only drawback lies in the limited hotel accommodations, owing to the presence of the Exposition, which will be in full blast. The Louisiana State Society meets just before the meeting of the National body. This will also bring and keep a large number of doctors in the city at that time. But in one way this will be of advantage as it will bring into contact a larger number of physicians. Let all who can attend the meetings and contribute each his share for the common good.

A Touch of Nature.

During the illness of members of the royal family of England, bulletins of all details of the sickness have been almost hourly issued to the laity. This would have been well enough had these details been limited to that which the people could comprehend, and which would give them that knowledge which was naturally due them. But the bulletins were unlimited as to details.

The same was true of much of the knowledge given to the public during Garfield's long illness, by a portion of his medical attendants.

Now the hero of the war of the rebellion is afflicted with a mortal disease. We have blazoned forth in the secular press every detail of General Grant's case, adding thereto pictorial illustrations. We do not question the propriety of giving the public daily bulletins which would satisfy every non-medical person; but it is in the interest of patients that the inmost events in the progress of a case be kept from a curious public. Only thus is the privacy of life kept as it should be. Even *Harper's Weekly*, a paper not disposed to labor in the interests of physicians or scientific medicine, protests against the advertising to which we refer.

It would seem as if the ideas of the new code were having full course in this matter. The lowering of professional standards in one regard is likely to be followed by a lowering in other regards, as fast as self-interest prompts. But our sole object was to call attention to the fact that the opportunity to advertise was seized upon by the same sort of medical men the world over.

Nor are the medical journals free from this same sort of thing.

Lately the *Medical Record* sent on slips to the secular papers, before its regular issue, stating that the private personal statements of

General Grant's physicians pronounced his case a simple one which would soon recover.

Next the *Medical News* issues slips, also in advance of its regular issue, and sends them to the secular papers, stating that the confidential communications of the General's physicians show that the General has malignant disease and will not recover.

No doubt this course advertised these journals, but did it do any good to any other persons? The pathological details of these slips were right for the profession, but to the laity they were much as a nude female figure on the open street. Such a figure in the privacy of the artist's studio may be correct; but on the street, all condemn it. So of these details of General Grant's case. These are proper and right for the medical profession, but in the daily press, it must be admitted that their value is questionable. To sacrifice professional confidence, and pander to a vicious public taste, may be the mark of progressive journalism, but we trust it may not become universal.

The Annual Commencements of the Detroit Medical Colleges.

The anniversary exercises for 1885 were held at the opera houses, March 2d and 4th. The Detroit Medical College graduated nineteen, and the Michigan College of Medicine twenty-one. Thus the total addition to the ranks of the medical profession, by the medical colleges of Detroit, for 1885, is forty. The addresses and music were on each occasion appropriate and inspiring, and all things passed off to the credit and pleasure of the colleges and their numerous friends. After the public exercises each faculty sat down with their graduates and invited guests to a social feast. After this, speeches of encouragement and congratulation were made, prolonging the jovial occasions far into the night. The great theme of the members of the faculties was the approaching consolidation of the two colleges. Bills are before the State legislature, the object of which is to facilitate the consolidation. It was hoped by the movers in this plan that a really strong college would result from a consolidation of these two schools, and so they would be better able to resist the pressure of charlatanism pressing upon the schools from without.

The addresses to the graduates of medical character were given by Dr. A. R. Smart, of Hudson, and Dr. D. LaFerte, of Detroit.

These addresses were carefully prepared, and delivered with the usual graceful eloquence for which these men are famous.

In absence of any information to the contrary, we take it for granted that the schools will hold their usual spring terms, and that even better teaching facilities will be afforded to the students who avail themselves of these advantages.

If the consolidation of the colleges takes place upon the basis published in the daily papers, Detroit will possess a medical college with many teachers. The unfortunate thing about the present status of affairs is its uncertainty.

General Grant's Misfortunes.

These are sufficient to call forth sympathy from every person, friend or foe. All are familiar with the nature of his present disease of the tongue. All are sufficiently well informed as to its course and inevitable ending.

From the record of his case it seems that he approaches death with the same heroic endurance that characterized his famous military career. None know so well as physicians, the endurance called for by approaching death by cancerous destruction of the tongue and pharynx. Hence, none so well appreciate the real fortitude of the general.

The episode by which he clung to legitimate medical advisers in face of the promise of cure by a secret process is worthy of the admiration of all rational physicians.

Then, his fall more than a year ago kept him confined for a long time, and from this he apparently never recovered.

His financial embarrassment, in connection with the failure of the firm of Ward & Grant, was a great and depressing burden, from which it does not appear that he ever fully rallied. That trusted friends proved to be scoundrels of the deepest dye, was a misfortune like that of Job. It is true that an entire nation still clung to him and did all that it could to mitigate his distresses of mind and body, but even this could not wipe out the misfortune.

The physical injury at his fall, the mental and physical injury of his financial disasters, and the physical and mental anguish of death approaching by means of an epithelial cancer of the mouth, furnish a cumulative group of reasons why even General Grant should falter. But there seems to be no evidence of his showing the sign of retreat. Busy at his writing, he occupies all of his time and

strength that he can spare, in the completion of his book. All honor to one who could both take cities and can control his own spirit.

Shall the Head of the Marine Hospital Service be Changed?

We notice that the name of Dr. A. N. Bell is being pushed for the position of Chief to the Marine Hospital service. Petitions are being circulated, so we are informed, in various States, and other means being used to influence the new appointing power to decapitate the present occupant for the good of Dr. Bell.

Now we have the utmost personal regard for Dr. Bell as a man, as a sanitarian, as an editor and as a physician. We wish for him all good, but we think he is in his right place, and we do not like to see him disturbed in his present abundant labors.

As to Dr. Hamilton, he is also a good man, has managed the service committed to his care with consummate ability, and so long as he is able to continue to manage this service we should like to see him remain undisturbed in his work.

Hence we think that these petitions had better be returned to their authors, and Dr. Bell and Dr. Hamilton be permitted to pursue their present avocations undisturbed.

As the readers of the *DETROIT LANCET* and both Dr. Bell and Dr. Hamilton are fully aware, we would like to see the entire service abolished, as we think it is an imposition all around, to all parties except such as draw their salaries. But since this is not to be at present, we suggest to the agitators that they let well enough alone. Really we are surprised that Dr. Bell would permit his name to be used, when the object is to exclude an equally capable man, and when he is already abundantly provided with employment.

In short, we believe that politics should have nothing to do with a service like the Marine Hospital. Let good men be retained so long as they are satisfactory in their conduct and work, and only remove them for reason other than the desire to put an equally good man in their place.

Preliminary Note on a New Salt of Cocaine.

Through the courtesy of Dr. A. B. Lyons, chemist for Parke, Davis & Co, I obtained a few days since a sample of a new salt of cocaine which he had succeeded in producing. It is a combination of hydrobromic acid with cocaine.

The appearance of the crystals, as obtained from a watery solution, is extremely fine.

The crystals are slender translucent prisms, of snowy whiteness, as large and distinct as the ordinary crystals of menthol. In this respect it is strikingly contrasted with the muriate of cocaine, which, if crystallized at all, requires the aid of a magnifying glass to distinguish the crystals. Owing to this perfection of crystalline form, any impurities in this salt would be at once detected.

On experimenting with a four-per-cent. solution, I found in an aggregate of some twenty-five experiments, that the hydrobromate of cocaine acted more rapidly than any of the other salts thus far introduced. Thus after an average of one minute the cornea and conjunctiva were fully anæsthetized. In five minutes the pupils were fully dilated. The first irritation of the conjunctiva is not different from that produced by the salts already in use.

In so far as could be estimated, the anæsthetic effect was greater, for the same amount of solution, than that of any of the salts formerly introduced. If farther observations shall show that this is the habitual action of hydrobromate of cocaine, it will have decided advantages over any of the other salts.

Dr. Lyons was led to make the salt in the hope that the sedative properties of bromine would increase the anæsthetic effects of cocaine. My observations made March 30th, March 31st, and April 1st, satisfy me that his hope has been realized.

Hydrobromate of cocaine has all the properties of the other cocaine salts, with such intensification of them as we have mentioned. To give each experiment in detail would be tedious, especially as each reader of this note can readily test the salt for himself. In the use of the salt both for its anæsthetic properties and for its mydriatic power, much time is saved, an item of no small account to the busy practitioner. My observations seem to indicate that there will be an actual saving in the amount of the drug required to accomplish a definite result.

L. CONNOR, M. D.

Memoranda.

New York has an orthopædic society.

Prof. Lucae died at Frankfort on the Main. He is widely known for his anatomical works.

It is announced that a new medical journal, to be called the *Argus*, is to be started in Cincinnati.

The last United States Congress appropriated fifteen thousand dollars to build a hospital for the homœopaths at Washington.

Italy pays six millions of dollars to maintain its penal system, while it pays only five and one-half millions for its school system.

All the wells, artesian or otherwise, of New York City, contain sewerage, owing to the peculiar geological formation of the island.

Twenty-four medical colleges have been born in Ohio. Ten died in early infancy, while ten remain to vex the anxious reformer.

The lectures of Prof. Robin at the École de Médecine have been suspended on account of the bad conduct of the students. Scientific man but poor teacher.

Dr. S. J. Jones has taken the editorship of the *Chicago Medical Journal*, vacated by Dr. J. Nevins Hyde. We cordially welcome him to the corps of medical editors.

Dr. Farrar (*British Medical Journal*) reports a case in which he tapped a woman seventy eight times, drawing from her one ton one hundred pounds of fluid.

The vacation of the chair of chemistry in Jefferson Medical College has led to a contest among chemists for its possession. It is said to be worth about seven thousand dollars a year.

Dr. Hulbert, of St. Louis Medical Society, says that by using a vaginal douche of a solution of bichloride of mercury, one part to three thousand, twice a day, he salivated five patients.

A St. Louis medical student is reported to have shot himself because he failed to pass his examinations. Perhaps this will prove to be the way of disposing of the excess of medical students.

The first edition of McNaughton Jones' work on Diseases of Women was exhausted in six weeks. A thousand copies of such a work sold in six weeks. How this happened, who can tell?

The "Campion Plan" of the druggists, died February 11, 1885. The drug firms could not be held together. Each dealer now sells proprietary medicines as he pleases, with much profit to himself or little.

The New York Health Department has been buying and analysing samples of quinine obtained at a large number of drug stores.

Many of the samples were found adulterated, some as much as fifty per cent.

The Duke of Argyll says that in a conversation with Darwin shortly before his death the distinguished naturalist said that he had not dispensed with God or eliminated a personal Creator from the universe.

Dr. J. S. Dodge advised the graduates of the New York College of Dentistry to weave into a rope of prosperity three strands—mastery of their art, the character and bearing of gentlemen, and common sense.

The *N. Y. Med. Journal* thinks that the American surgeons surpass others in their knowledge of the principles of antiseptic surgery, and in the imperfect manner in which they put these principles into practice.

A statistician estimates that eighty percent. of the population of this country live upon forty-five cents per day. Of course very many live on vastly less, and some have an income a thousand times or more greater.

Dr. Buck in the *London Lancet* says that if the patient be not thoroughly under the influence of chloroform, any irritation of the fifth nerve will produce slowing of the heart and final stoppage, through the pneumo-gastric nerves.

Dr. Squibb finds that even a twenty-five per cent. solution of oleate of cocaine fails to be able to pass through the epidermis of the skin so as to induce local anæsthesia of the skin. Thus for this purpose oleate of cocaine is a useless preparation.

The *Med. Record*, speaking of the meetings of the new code New York State Medical Society, says: "The scientific contributions would be more symmetrical, if the ophthalmologists did not feel the burden of the duty of paper reading so heavily."

The New York State Medical Association received 559 members during its first year, and new members are constantly being added. Unlike the other New York State Society, it is perfectly free from entangling alliance with politics and legal complications.

Mr. Lawson Tait says: "The amount of worry which is given him by every case of hysterectomy, even when successful, is such as to be almost beyond the recompense of any fee; and the disappointment inflicted by every death is quite indescribable."

The *U. S. Medical Investigator*, the homeopathic organ of Chicago, says of the Illinois State Board of Health: "The board is becoming more and more allopathic." Are the homeopathic members of the board becoming regular in their medical beliefs?

A woman friend of the notorious Dr. Buchanan, on being questioned as to why she placed M. D. after her name on her sign, said that it did not signify that she was a doctor, but that it did signify "Money Down." Smart woman if she got "Money Down."

Dr. W. H. Andrews (*New England Med. Monthly*) reports a case of regular menstruation in a woman aged eighty-four. She menstruated regularly till sixty years old, and then ceased till eighty, when she began again, and has menstruated regularly ever since.

A correspondent of the *Maryland Med. Journal* says that the doctors' signs in Austria are enormous. He saw one in a country village forty-two feet long and proportionately broad, almost covering one side of its owner's house. In large cities the signs are smaller.

The *Medical News* records the report of an incarcerated ovarian hernia in a infant seven months old. Being unable to reduce it, the doctors extirpated it, and the child lived. It is claimed that this is the second recorded case of this sort, the first dying from peritonitis.

The *Medical News* concludes a review of the treatment of diphtheria by the statement that, "in Germany antipyretic and supporting measures, by quinine and allied means, and ice are mainly relied upon." The special treatment in favor in this country does not find favor there.

Dr. James E. Reeves has resigned the position of Secretary of the West Virginia State Board of Health, and has been succeeded by Dr. L. D. Wilson. We greatly regret this change, as Dr. Reeves was just the man for the work placed before him. Still bad health compelled him to give it up.

The *Courier Record of Medicine* says that it has lately been compelled to throw into the waste basket articles because of want of care in their preparation. It is more probable that the doctors never were prepared to write articles at all. Possibly they might have

done better, had they been decently educated.

Dr. Hepburn, in the *Independent Practitioner*, says he extracts teeth without pain by diluting the tincture of purified extract of cannabis indica with from three to five parts of water, then by the finger rubbing this upon the gums for a short time, and dipping the tip of the forceps in it before their application to the teeth.

At Harvard Medical School last year, among 259 students 96 per cent. spent six terms in attendance at the lectures and other courses. Out of 64 applications for a degree 14 were rejected. In most schools, at most but two short terms are required, and all the applicants for a degree are accommodated. Why the difference?

The editor of the *South African Medical Journal*, at the end of his first year's experience, says that he has far less cash than at the commencement of his enterprise. He is only one of the many editors who begun last year their new enterprises. The consolation is that they get experience for their money. Is not knowledge worth paying for?

In our notice of the last volume of the *International System of Surgery* published by William Wood & Co., by oversight we did not state that the general agent for this work in this portion of the west, is Mr. J. H. Mattison, of Buffalo, N. Y. All orders addressed to him will receive prompt attention. The price of this work, in cloth, is \$6.00 per volume.

The "Star Cough Cure" is endorsed by the daily press of Baltimore, Md., by the Governor of the State, the Mayor of the city and the Health Commissioner of the same, to say nothing of a string of doctors and other representatives of political powers. Certainly this is a disgrace to common honesty and decency. The state of Maryland bows to advertise a secret nostrum firm.

The best advertised doctor in Germany is Scheninger. He is Bismark's pet, and the detestation of the regular physicians. While in Munich years ago, he is said to have had an affair with a woman, for which he was placed in jail, and expelled or dropped from medical societies. He is said to have an enormous practice. His licentious notoriety seems to have added to his popularity with large numbers of women.

The association of American Medical Editors will hold its next annual meeting Monday evening preceding the meeting of the American Medical Association. The president, H. O. Marcy, of Boston, will give an able address, and doubtless others will be prepared to contribute to the interest of the occasion. All editors who can should be present at this meeting, if for no other reason than to make each other's personal acquaintances.

Cincinnati made about twenty-eight and one-half million gallons of beer last year, and consumed over eighteen millions of gallons. Each man, woman, and baby, on the average must have drunk two barrels of beer. Such are some of the statistics presented by the superintendent of commerce of Cincinnati. Evidently Cincinnati grows rich by drinking its own beer. Of course beer simply whets the appetite for stronger drinks, whiskey, etc.

Dr. Campbell in the *Popular Science Monthly* presents some special studies of the amount of sickness of each person. He concludes that the average sickness of the better class of the adult male population of the United States and Canada is one week and a half each year. The amount of sickness increases with each year of life, so that while the young man of twenty-one is ill only half a week, the man of sixty is ill about two and three-quarters weeks each year.

Our old contributor, Dr. J. G. Kiernan, superintendent of the Chicago Insane Asylum, lately called the engineer to account for his drunkenness. The barely brute at once knocked the doctor down and kicked him about the head and body, severely injuring him. Shortly after he recovered from this assault an attendant repeated the same process of mauling. As no redress could be had from the commissioners of the asylum, the doctor carried the cases into a justice's court.

No nation hankers for the honor of originating venereal disease. The Neapolitans call it the French disease; the French, the disease of Naples; the Poles call it the German disease; Hollanders and Englishmen refer it to Spain; the Orientals lay it to the Franks; the Persians to the Turks; the Portuguese christen it Castilian and the Chinese call it the disease of Canton. Other people follow the same rule as these men-

tioned. Syphilis has no father who is willing to stand responsible for its birth.

The *Medical and Surgical Reporter* says: "It is time for us to tell the intelligent country doctor that he is just as capable of treating the majority of cases that come before him as is the fashionable city specialist." Stated in this way he is far more capable. In truth the average country doctor is superior in all that makes a genuine doctor to the average city doctor. The latter has opportunities that would enable him to be superior. The country doctor is compelled to improve his opportunities, hence he is ahead.

The *New York Medical Journal* thinks that if young men had a real scientific spirit, they would ponder more over their writings before sending them to press. They would mould and re-mould their actual material until it was in a presentable form. No doubt he is correct. But the real remedy lies in the literary education of the doctor, young or old. This is not what it should be in most cases, and hence the productions of the pens of doctors are not what they should be. Still, even these could take more care in writing without harm to themselves.

Dr. Fredrick Theodore Frerichs died March 14th, 1885. He was born March 14, 1819. He occupied chairs in order at the Universities of Kiel, Breslau, and Berlin. During the Franco-Prussian war he was physician-in-chief to the army. He is well known to all the medical world through his work on Diseases of the Liver, his contributions to Wagner's Dictionary of Physiology, and to the Dictionary of Chemistry, by Liebig, Poggen-dorf, and Woehler. His death is a great loss to scientific medicine, and especially to the teaching of medicine in Germany.

Dr. Buckhill says that in England and Wales there are ninety-six private mad-houses. Most of these are carried on by others than doctors, who trade in the insane as they would in beef. It is customary for the keepers of these institutions to pay those who send the crazy to them twenty per cent. of the amount received for keeping the patients. Again, keepers are let out by these asylums on condition that the keeper pay the asylum one half of his earnings. These are only some of the abuses of these private asylums. So numerous and grave are they that Dr. Buckhill thinks the only way to deal with them is to abolish all these houses.

Speaking of the Medical Examining Boards proposed in several states, the Kansas City *Medical Index* says that the "Common sense business men sitting upon such a board would simply represent the common ignorance of the community, and would inaugurate a farce." Again the popular favor is with the so-called practical man. "A deeply read man who has learned from books and clinics, is a theoretical man; the man who never reads, who spends his time talking with people and soliciting practice is the practical man." "Competition makes the weaker men in the profession the calumniators of its thinkers." To change these things, a State Board is incompetent.

The New Orleans *Medical Journal* reports itself as involved in lots of trouble. It took the *Journal* from other hands who were careless in all business matters. Subscribers who had paid were not noted on the *Journal* books. These became mad when asked to pay for the *Journal* a second time. Then in the absence of the *Journal* manager, his office boy set himself up as manager of the *Journal*. He collected subscriptions and dues for advertisements, and gave receipts, without making any record on the *Journal* books of the nature and extent of his transactions. He speedily skipped to Texas, leaving the financial affairs of the *Journal* in a worse muddle than ever. Best regulated families have trouble.

Dr. W. B. Platt in the Maryland *Med. Jour.* laments over the impudence of the proprietary medicine vendors. He thinks that physicians should combine to do what is possible to discomfit their work. He says, "It would be a reflection on the intelligence of any reputable physician to go at length into the reasons why in the name of decency, expediency and right, the sale of proprietary medicines should be discouraged; we know that in the majority of cases they are cheap, nasty, unreliable, if not absolutely harmful when sold and used indiscriminately as they are designed to be. A future age will consider the sale of proprietary medicines as much a swindle, and from an economical stand point, a loss, as we now consider lotteries or gambling."

Graduates of American Medical Colleges: Memphis Medical College, 33. Minnesota College Hospital, 16. Med. Dept. Arkansas

Industrial University, 3. Central College of Physicians and Surgeons, Indianapolis, 9. Hospital Medical College of Evansville, 6. Rush Medical College, 161. Buffalo Medical College, 46. Hahneman Medical College, 97. Chicago Homœopathic Medical College, 30. Med. Dept. University of Tennessee, 59. Med. Dept. Univ. Nashville and Vanderbilt, 100. McNarry Medical College (Nashville), 9. Michigan Medical College, 21. Detroit Medical College, 19. Starling Medical College, 30. College of Physicians and Surgeons, of Baltimore, 145. Medical College of Ohio, 58. Miami Medical College, 27. Baltimore University of Medicine, 6. Medical Department of the University of New York, 173. Louisville Medical College, 62. Woman's Medical College of Philadelphia, 22. Medical Department of Howard University (D. C.), 25. College of Physicians and Surgeons of Chicago, 60. Medical Department of the University of Louisville, 74. Albany Medical College, 33.

Dr. Furber, writing from Kansas to the *Eastern Medical Journal*, says that the surgical mania of his State is the spaying of women and young virgins. He says that in his waking hours he often dreams of a courting scene in which the conversation runs thus: "Miss Doolittle, have you been spayed?" "Sir?" "Have you undergone ovariectomy?" "Please explain yourself, Mr. Blunt." "I desire to be informed, Miss Doolittle, whether or not you have been oöphorectomised?" "Certainly, I have, Mr. Blunt. A council of regular physicians was called by my parents, when I was a child, to consider the nervousness exhibited by my three elder sisters and myself, and thus oöphorectomy was performed on all four of us, by that eminent surgeon, Prof. Cassius Fitz Greene Browne, A. M., M. D. My older sisters all died because they were not operated upon earlier in life. So the doctors said, and they all agreed that where parents neglect to have their girl babies oöphorectomised, it ought to be done by the city surgeon appointed for that purpose, to prevent the thousand and one diseases that assail girls when they grow up to womanhood as their Creator made them, and they farther say that it should no more be neglected than vaccination, and certainly my own case proves the truth of their assertion." "I will thank you for my hat, Miss Doolittle. Good night." "Good night, Mr. Blunt."

Editor's Book Table.

Eighth Edition of Erichsen's Surgery, Vol. II.*

In a late issue we called attention to the first volume of Erichsen's Surgery. The present volume meets the anticipations awakened by the first one. It treats in regular order of the surgical diseases of the skin and its appendages; of the diseases of the nervous system; diseases of the lymphatic system; diseases of the veins; aneurisms of all kinds and every portion of the body; all surgical diseases of the arteries; all surgical diseases of the veins; all surgical diseases of the bones; all surgical diseases of the joints; most diseases of the head and neck, excluding most diseases of the eye and very many of the ear; surgical diseases of the jaws and their appendages; plastic surgery of the face and neck; surgical diseases of the mouth and throat; operations upon the air tube and chest; diseases of the breast; diseases of the abdomen; herniæ; intestinal obstruction; operations upon the abdomen; diseases of the large intestine and anus; pyæmia and septicæmia in urinary diseases; surgical diseases of the kidney and bladder, prostate and urethra, penis, scrotum, testes and cord; diseases of the female genital organs.

Each of these several topics is discussed with a thoroughness and facility for which this surgeon has so long been justly famous. The illustrations are more numerous than in the first volume, and are quite as well executed.

In an appendix the author gives the latest Listerian views respecting antiseptics. By this it appears that corrosive sublimate is coming into more general use in England as the surgical antiseptic. The strength now agreed upon as the best is eight and three-quarter grains to the pint of water. This is about one part in one thousand. This solution is so strong it cannot be employed to disinfect instruments, because it corrodes them. This solution is used not only to disinfect wounds but also ligatures and surgical dressings. Made with water, this solution is quite irritating. To remove this bar to its usefulness Sir Joseph Lister is using the blood

serum of the slaughter houses as the agent for dissolving the sublimate. It is found that when this serum is used, solutions as strong as one to fifty are without inconvenience in irritating the skin. Good results are reported as regards the use of this preparation in operations of many sorts. But all results are not so favorable, so that it is impossible to say that it is the long sought antiseptic solution. In conclusion Erichsen says, "So far as the evidence goes at present it may be said that mercuric chloride has been proved to be a powerful and most efficient antiseptic, and to be capable of being safely used in the treatment of wounds, but as with all other really potent antiseptics, it is locally irritating and generally poisonous, and as it possesses these properties in a higher degree than most others a corresponding degree of caution is necessary in the preparation of the solution and dressings and their use."

As a whole this is a splendid volume, worthy of the honest pride of every surgeon. Full of wisest counsel it is for all who desire practical instruction in surgical matters.

Transactions of the American Ophthalmological Society for 1884.*

At this meeting twenty-six papers were read and more or less discussed. Very many were reports of rare and peculiar types of morbid states; some of them described new instruments. The discussions appended to each paper are not infrequently as interesting and profitable as the papers themselves. Workers in this special field will be interested in this report, as will very many general practitioners who devote some of their time to this sort of study and practice.

Dr. Basket Derby reported a case of chronic iritis with reference to the value of iridectomy in curing it. The recurrent iritis persisted to an unusual degree over more than two years. An iridectomy was made, but without any perceptible effect upon the iritis. Ultimately the disease wore itself out. Derby does not think an iridectomy would be justifiable in a similar case. Dr. Knapp thinks that in simple recurrent iritis, iridectomy is not indicated or likely to be followed with good effects, but in cases complicated with cyclitis and glaucoma the iridectomy should certainly be performed.

*THE SCIENCE AND ART OF SURGERY, by John Erichson, F. R. S., LL. D., F. R. C. S. Eighth Edition, revised and edited by Marcus Beck, M. S. With one thousand illustrations. Vol. II.

Philadelphia: Lea Brothers & Co. 1885. Sheep, pp. 1,205.

For sale by Phillips & Hunt, Detroit, Mich.

*TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY, 1884. Boston, Mass. Copies can be had from the Secretary at 139 Boylston street.

D. C. S. Bull reports three cases in which he successfully restored the eyelid by transplantation of the flap, without a pedicle. Full details of the peculiarities of each are of importance to all operators. Dr. Fryer contributes a similar case.

Dr. Richard Derby reported a case of gangrene of both lids of the right eye in a man, in which the tissue was restored without plastic operation.

Dr. Geo. C. Harlan reported a case of hysterical monocular blindness, with violent blepharospasm and mydriasis—all of which were relieved by the mental impression induced by a wooden magnet. Of course the patient did not know the magnet was of wood; but it produced such an effect upon her mind as to afford immediate and permanent relief.

Dr. Knapp reported two cases of total blindness, coming on suddenly in the course of a few hours, having no other accompanying symptom than optic neuritis. One man recovered with perfect sight, and the other became almost totally blind. Certainly such cases must be rare.

Dr. W. F. Norris reported a family of seven children all affected with atrophy of the optic nerves. The parents of these children had perfectly healthy eyes, but on the mother's side the disease extended backwards, attacking the great-grandmother, a grand-uncle, and several cousins. The disease begins with the formation of a central scotoma, first for color only, so slight that the different hues, though dimmed in intensity, are still readily recognized. The defect gradually progresses until complete scotoma both for form and light is developed. The peripheral parts of the retina are affected later, and, when they are involved, often lose to a marked degree their sensibility to color, but rarely to form and light. The patient usually retains sufficient vision to do certain forms of coarse work. The study of the several cases is given in an exhaustive manner, full of interest to all students.

The remaining cases involve facts and principles quite as important as those we have directed attention to.

The Year-Book of Treatment.*

Of compends we have many; of books pertaining exclusively to treatment there are not

* THE YEAR BOOK OF TREATMENT FOR 1885.—A Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers & Co. 1885. Cloth, pp. 316. For sale by Phillips & Hunt, Detroit, Mich.

a few. While this book is published in Philadelphia, it was entirely compiled in England. Its compilers are all men well known for their writing upon the subjects which they here review. Hence, it is natural to suppose that they have given their personal judgment in the subjects discussed as well as the judgments of the original writer. The book aims to present a complete account of all the more important advances made in the treatment of disease. Has it done this? This is largely a matter of individual judgment. Many persons regard that as an advance which others, quite as competent, say is a retrogression. However, that such men as have appended their names to the statements here made, should think these statements are in advance, gives a hope that they may prove to be correct. At least they are worth considering.

Each department of practice has been fully treated by itself. It is a useful book to such practitioners as have not the files of a large number of medical journals at their disposal. Also to such as have not the time or disposition to sift evidence for themselves.

Delafield and Prudden's "Handbook of Pathological Anatomy and Histology.*"

This book, like a former one by Delafield is intended to serve as a guide for such persons as desire to know how to make a post-mortem examination properly; but it is also far more. It seeks to supply all the needs of such as desire to add a knowledge of the lesions of diseases to that of their clinical symptoms. The point from which this book looks is that of the physician who is familiar with any given disease as it manifests itself clinically, and desires to ascertain the lesions of this disease. The subjects discussed are numerous and important. It tells how to make post-mortem examinations, how to preserve diseased tissues, how to prepare them for microscopic examination. It gives an account of such general processes as inflammation and degeneration. It describes tumors, lesions of every portion of the body, lesions of general diseases, lesions of violent deaths and of deaths from poisoning.

* A HANDBOOK OF PATHOLOGICAL ANATOMY AND Histology, with an introductory section on Post-Mortem Examinations and the methods of examining and preserving diseased tissues. By Francis Delafield, M. D., and T. M. Prudden. New York: William Wood & Co., 1885. Cloth, pp. 575. For sale by John Macfarlane, Detroit, Mich.

The illustrations are all original with the authors, they drawing them at first, and then reproducing them by photo-engraving art. All who are familiar with Dr. Delafield's capabilities in this field will understand the faithfulness of the work.

As a whole, it more than fills the place of Rindfleisch's Pathological Histology. It contains all the good features of this work, and very many additional ones which will commend themselves to the practitioner who earnestly desires to make the most of his clinical studies; besides, it avoids all that is undesirable in the other work.

The style of the work is more attractive than that of any similar work that has come to our notice. The mechanical execution of it surpasses the usual efforts of the publishers. It is not only an ornament to such libraries as contain it, but it is a necessity to every library of every medical man who desires to base his work upon the soundest pathology, and grow along with the growth of the profession.

Kirke's Hand-Book of Physiology—Eleventh Edition.*

As the January issue of Wood's Medical Library for 1885, the first half of this work lies before us. As far as mechanical execution is concerned, this first number is superior in all respects to any number of this famous library that has thus far appeared. The paper is better, so that the illustrations show to better advantage.

This is an old and deservedly popular work on physiology. As in former editions all controvertible matter has been omitted, the authors being satisfied to present that which they deem established. This will not only meet the needs of the medical student, but also the needs of the busy practical physician who has brief leisure for the study of the questions here discussed. We shall hope that the entertaining manner in which this subject matter is presented will induce all the subscribers to this work to read every page. The active practitioner does not do enough of this sort of study. Of its helpfulness he has a very imperfect notion. But rightly understood and deftly applied to the problems of

clinical observations, there is no study that is so helpful to scientific medicine.

Knapp on the Use of Cocaine in Ophthalmic and General Surgery.*

This is really a reprint from the *Archives of Ophthalmology*, for December, 1884, with additions from the writings of other observers in the same field. All who do not possess the *Archives* will do well to purchase this handsome reprint.

Abstracts from Exchanges.

Prepared by A. B. Lyons, M. D., Walter P. Manton, M. D., and W. B. Chittick, M. D.

Nervous Diseases.

A CASE OF UNILATERAL SPASM OF THE TONGUE.—Spasm of the tongue, occurring as an independent affection, is recognized to be quite rare. A case has recently fallen under the care of Dr. Edmund C. Wendt, which he records in the January number of *The American Journal of the Medical Sciences*. The history of the case shows the decidedly beneficial action of galvanism in localized muscular cramps.

Ophthalmology.

WOLFE'S TREATMENT FOR DETACHMENT OF THE RETINA.—Dr. J. R. Wolfe (*Brit. Med. Jour.*, Dec. 20th, 1884) in a lengthy paper gives a full account of his observations on a new method of treating detachment of the retina. The principle of his treatment is to remove the serum from the eye beneath the detached retina just as the serum is removed from the pleural cavity in pleuritic effusion. The effused fluid is withdrawn by a subconjunctival sclerotomy, practiced in the meridional direction. The steps of the operation in a case in which there is a large continuous detachment of the retina and vision is nearly abolished, are as follows: By the erect ophthalmoscopic examination the site of the detachment is ascertained, and the side to which the effused fluid inclines. It is essential to repeat this examination,

*KIRKE'S HAND-BOOK OF PHYSIOLOGY.—By W. M. Baker, F. R. C. S., and V. D. Harris, M. D., London. Eleventh edition, with nearly 500 illustrations. Vol. I. New York: William Wood & Co. 1885. Cloth, pp. 373. Sold only by subscription. J. H. Mattison, General Agent, Buffalo, N. Y. Terms, \$15.00 a year, twelve volumes.

*COCAINE, AND ITS USE IN OPHTHALMIC AND GENERAL SURGERY.—By Dr. H. Knapp, with Supplementary Contributions, by Drs. F. H. Bosworth, R. J. Hall, E. L. Keyes, and W. M. Polk. Cloth, pp. 87. Price, 75 cts. For sale by John Macfarlane, Detroit.

putting the patient's head in different positions, with the head upright, horizontal, inclined to the right, to the left, upwards and downwards. The side to which the fluid inclines in these different positions having thus been determined, the patient is put under chloroform and the ophthalmostat introduced. A vertical incision is now made into the conjunctiva, half an inch long, in the region of the detachment. The assistant separates the lips of the wound in a horizontal direction, by means of two strabismus hooks. Tenon's capsule is then opened, the sclerotic laid bare, and the eyeball rotated in such direction as to expose the corresponding part of the sclerotic towards which the fluid inclines. Into that part a broad needle is introduced having an external flat surface, and an internal convex surface, which thus gives the incision a curved form. The needle is withdrawn without the slightest inclination, and the liquid flows on withdrawal of the instrument. The instrument is introduced obliquely, in such a manner that the edges of the scleral wound may overlap each other, and not remain gaping when the instrument is withdrawn. If it is thought that more fluid remains a fine silver spatula is introduced and pressed gently on the lips of the scleral wound. If the detachment be not very extensive, or the eyeball too prominent, or, rather, soft, he operates with a flat scleratome so as to produce a linear instead of a curved incision. The lips of the conjunctival wound are now brought together, by means of one or more fine silk sutures and both eyes shut by strips of court-plaster, lint and a bandage. The patient lies on his back for two or three days, as in cataract operations. On the third or fourth day the dressing is renewed, and on the fifth day the eyes are opened and the results of the operation ascertained. Generally by this time no trace of the operation remains. Of seven operations three were perfect successes.

THE CONDITION OF REFRACTION OF THE HUMAN EYE DURING THE FIRST FIVE YEARS OF LIFE.—Dr. Horstmann (*Ophthalmic Review*, Dec. 1884) concludes a most interesting study of several hundreds of eyes of children under five years of age. He concludes from all his data: The condition of refraction of the eye of the new-born child is for the most part hyper-metropic, sometimes it is emmetropic, and in rare cases myopic. It is probable that in the latter it is lental myopia. As life advances the refraction steadily increases,

hypermetropia becomes more frequent, while emmetropia and myopia are more common. The tendency to the latter is very often congenital, and it shows itself even sometimes soon after the first year of life, and it may with little doubt be assumed that these are the cases in which the highest degrees become developed. They are not a consequence of school life, but show themselves previously, and are only increased by the school. The medium and lower degrees of myopia, however, can be caused by school studies.

THE NATURE OF SYMPATHETIC OPHTHALMIA.—Deutchmann in an elaborate paper in *Gräfe's Archives* gives the results of a large amount of experimentation and observation during a period of two years. He concludes thus:

"I have been led by all the facts brought forward to form the opinion that in all probability the sympathetic ophthalmia met with in man is an inflammation spreading from the first to the second eye along the optic nerve; that the exciting cause is either a micro-organism, which in some manner has been introduced into the eye, or perhaps, though rarely, a chemical irritant as well."

Dermatology.

PSORIASIS — VERRUCA — EPITHELIOMA, A SEQUENCE.—Dr. James C. White, of Boston, in the January number of the *American Journal of the Medical Sciences*, presents brief notes of two remarkable cases of disease—cases extraordinary, not for the rarity of the pathological processes they represent, but for the very unusual sequence of tissue-change exhibited in their course. There were three distinct pathological affections of the cutaneous tissues: psoriasis, verrucous hypertrophy, epitheliomatous new growth; not occurring independently of each other, but as successive, mutual transformations in the above order.

The three dermatoses which enter into the clinical history of Dr. White's case, and which are in their nature apparently as unlike as their companionship is rare, have a close affiliation in their anatomical relations. The transformation of patches of psoriasis into horny or warty, permanent growths is not referred to in most works on dermatology as of possible occurrence even; the transformation of verrucous growths into epithelioma is of not very infrequent occurrence; but the uninterrupted sequence followed in this case, psoriasis—verruca—epithelioma, or in other

words psoriasis, as a cause of carcinoma, is extremely rare or unparalleled in dermatological history. The practical lesson to be deduced is that the transformation of patches of psoriasis into verrucous hypertrophy must be regarded as an ominous occurrence, and that the softening or other change of such horny growths demands thorough excision without delay.

CASE OF DERMATITIS HERPETIFORMIS CAUSED BY NERVOUS SHOCK.—Dr. Louis A. Duhring reports, in the January issue of *The American Journal of the Medical Sciences*, a marked example of what he has described as dermatitis herpetiformis. The history of the case, including the cause of the disease—a violent shock of the nervous system—is both interesting and instructive.

Therapeutics.

HYDROCHINON AS AN ANTIPYRETIC.—Dr. P. Seifert (*Berlin Klin. Woch. London Medical Record*) gives the following facts respecting hydrochinon: It is a benzol derivative from the formula $C^6H^6O^2$, and is obtained by adding sulphurous acid to chinon. It crystallizes in rhombic, colorless prisms, is little soluble in water, easily so in alcohol and ether, and has a sweetish, but not unpleasant, taste. It is isomeric with catechin and resorcin, and acts better than either.

In small doses it caused death with tonic convulsions in frogs. Rabbits bore four-grain doses without inconvenience, eight-grain doses caused slight cramps; and twelve grains caused strong clonic convulsions, the arteries being dilated, the salivary and lachrymal secretions increased, the temperature raised two degrees, and breathing retarded. Death occurred in an hour and a half. Larger rabbits bore larger doses without death. On man its antipyretic action is almost unfailing. It has been given in doses of from fifteen to ninety-nine grains. The former doses lower the temperature from one to six degrees, F. The temperature begins to fall in a quarter of an hour, with sweating; it remains lower for two or three hours, and then rises during another hour to its former level. The pulse is slower but not altered in quality, the respiration is unaltered, the urine darker. In continued fever, three or four doses a day of fifteen grains each suffice to keep the temperature at a moderate level of one hundred and one degrees F. No disturbing symptoms occur in its repetition.

Out of forty patients treated with hydrochinon, only four suffered from frequent vomiting, so that the remedy had to be discontinued. The noises in the ears, headache, and even delirium, which occasionally attend large doses of kairin, were never observed. The only discomfort was a slight shivering while the temperature rose again. The sensorium was most favorably affected in the typhus patients, the mind becoming clearer.

The retardation of the pulse after each dose was parallel with the fall of temperature and equally important. The recurring perspirations were seldom complained of; indeed patients in high fever, with a dry tongue and burning skin, found great relief from them. But the drug is apparently contraindicated in phthisis with much tendency to sweating.

In children the effect is equally favorable. Five grains are sufficient for a child from two to four years old; seven grains for older children.

Action of Remedies.

THE ACTION OF COCAINE ON THE FROG, ETC.—Dr. H. M. Biggs (*Journal of the American Medical Association*, January 17, 1885) gives the results of extensive experimentation to determine the action of cocaine. He concludes thus:

1. It has a powerful local anæsthetic action on the skin, mucous membrane and the eye. It usually produces mydriasis.
2. It has a depressant action upon the heart, reduces the force and the frequency of its pulsations, and finally paralyzes it (first the ventricle and then the auricle) in diastole.
3. In small doses, it at first increases the number of respirations, then decreases them, and in large doses diminishes them rapidly from the first, finally causing death from a paralysis of respiration.
4. In small doses it at first slightly heightens, and then greatly depresses the reflex action of the spinal cord. Large doses depress it from the first.
5. Small doses at first slightly increase and then depress the irritability of the sensory nerves; large doses depress from the first.
6. Both large and small doses have a depressant action upon the motor nerves.
7. It paralyzes the pneumogastric nerves.
8. Doses of moderate size diminish the excitability of the striated muscles.
9. The local application of cocaine to any of the more highly constituted organs and

tissues causes a temporary cessation of their functional activity.

10. From the local and constitutional action on the different organs and tissues, it is rendered probable that its general action is wholly a local one, exercised on all parts for which it has a chemical affinity through its presence in the blood.

Practice of Medicine.

FRERICHS ON DIABETES.—The work of this celebrated clinician is summarized (*Centralb. für die Med. Wissensch., London Medical Record*), thus :

The normal amount of sugar in the blood during life is from twelve to thirteen one hundredths of one per cent. As to glycogen, constantly found in the blood, in inflammatory exudations, in cartilage, in the testes, the liver, the muscles, etc., the author says that it may accumulate in the liver and the muscles after any kind of nourishment and asserts, in spite of failure of sufficient proof, that the sugar is converted into glycogen. The glyco genous degeneration of the kidneys in diabetes mellitus is mentioned as analogous to this. As to the combustion of the blood sugar, it is found to disappear completely some time after the removal of blood from the body, mostly by conversion into lactic acid ; but whether this process goes on within the body cannot be proved. The glycogen of the muscles is used up during their activity to form carbonic acid and heat. In the conversion of carbohydrates the liver has thus a two-fold function : on the one hand, glycogen is formed and stored up within it from a part of the sugar brought by the portal vein ; on the other hand, glycogen is converted into sugar, and carbohydrates are given back to the blood for the general needs of the vital processes.

There is no evidence of combustion of the carbohydrates in the liver.

If the percentage of sugar in the blood exceed the normal there is glycosuria. Three groups of cases are given.

1. Glycosuria after poisons.—It constantly occurs after poisoning by curare, carbonic oxide, amyl nitrite, ortho-nitro-phenyl-propionic acid, and methyl-delphinin. It occasionally occurs after large quantities of morphine, chloral hydrate, hydrocyanic acid, sulphuric acid, mercury and alcohol. Glycosuria after infectious diseases is allied to the above ; e. g., cholera, anthrax, diphtheria, typhoid fever, scarlatina, and malaria. In the last disease it was found but once in several hundred cases.

2. Glycosuria from digestive derangements.

—While as a rule in healthy persons the ingestion of large quantities of sugar does not cause glycosuria, exceptional cases occur, in which even small quantities have this result. Apart from this, glycosuria is found occasionally in connection with gastric catarrh, especially in those of inherited gouty tendency. It occurs chiefly during the intervals of the gouty attacks. Experiments on the introduction of sugar in cases of phosphorus poisoning, cirrhosis of the liver and portal obstruction, gave only negative results as to the presence of sugar in the urine.

3. Glycosuria from nervous derangement.—This includes glycosuria after psychic exaltation, neuralgia, cerebral disturbance, and final by cerebral hæmorrhage and cerebro-spinal meningitis.

Diabetes mellitus is distinguished from glycosuria by the appearance of extensive derangements of the tissue changes generally, which lead to general deterioration, to many local diseases, and usually to death. Twelve cases of diabetic cures are given. It often passes into some other grave disease—nephritic, diabetes insipidus, arterial sclerosis, and their consequences. But death is far the most frequent result. Fifty-five cases with the necropsies are reported.

As to treatment he advises a proper mental and bodily diet as of the greatest importance. Carefully conducted bodily exercise is also most beneficial. Milk was found unfavorable. Many alkaline waters were found very useful when taken fresh from the springs. Opium was found important as it lessened thirst, urine and sugar, at the same time increasing bodily weight. Lactic acid had no result and glycerine was harmful. Salicylic acid, salicylate of sodium and iodoform deserve farther trial. All weakening influences and cutaneous irritants are to be avoided.

The increase of sugar in the blood is the essential element of diabetes. In advanced diabetes it is shown that the formation of glycogen in the liver gradually declines, so that the sugar absorbed from the portal circulation passes directly into the systemic circulation. There is as yet no satisfactory evidence of the lessened combustion of the sugar of the blood in this disease.

TRANSMISSION OF PHTHISIS BY ANIMALS.—

M. Vallin (*Progres Medical*) presents the danger of food as a means of transmitting phthisis.

1. The tuberculosis of animals is specifically

identical with human tuberculosis. 2. It has been proven that the ingestion of raw tuberculous matter may engender tuberculosis. 3. The injection under the skin, or into the peritoneum, of the blood or muscular juices of phthical animals, is capable of determining phthisis. 4. The ingestion of raw flesh of phthical animal is capable, in certain cases, of transmitting the disease, especially abdominal phthisis. 5. The inoculability of tubercle is not destroyed, except by a notably higher temperature than that attained by the central portions of roasted beef. 6. The milk of phthical cows may transmit tuberculosis, and is especially dangerous when the mammary glands are tuberculous. 7. Boiled tuberculous milk is harmless. 8. In order to guard against all danger, we should, at all events, provisionally prohibit the use of meat of animals, the subjects of confirmed generalized tuberculosis with commencing emaciation. 9. The habit of eating undone meats should be discouraged, and as a matter of security, milk should always be boiled. 10. Attempts should be made to diminish frequency of tuberculosis in animals by choice breeding, improved stalling, isolation of infected animals, disinfection of contaminated stalls, etc. 11. Tuberculosis of horned cattle should be ranged among contagious diseases affecting them, and submitted to the laws applicable to these. 12. Assurance societies against tuberculous cattle should be encouraged in order to indemnify the proprietors for losses from this cause.

THE TRANSMISSION OF PHTHISIS BY MAN.—Prof. Corradi (*Progress Medical*) says 1. The contagion of pulmonary phthisis is possible. 2. Prolonged cohabitation is one of the principal conditions of its occurrence. 3. Debility and all causes which diminish the power of organic resistance render it more easy. 4. The possibility of transmission through the medium of clothing, goods, etc., has not been sufficiently proven. 5. It is also doubtful whether the milk or flesh of tuberculous animals can give rise to the transmission, especially after culinary preparation. 6. At present regulation of cohabitation is the only prophylactic measure that can be had recourse to. 7. Investigation should be continued in different countries with the aid of uniform formulas.

NOTE ON A PECULIAR FORM OF PULMONARY CONGESTION, NOT GENERALLY KNOWN AND TERMINATING IN SUDDEN DEATH; TOGETHER WITH A PLEA FOR CARDIAC ASPIRATION.—In a remarkably suggestive paper in the

January number of *The American Journal of the Medical Sciences*, Dr. A. H. P. Leuf, of Brooklyn, draws attention to a peculiar form of pulmonary congestion, which ends in sudden death, and he enters a plea in defense of aspiration of the right heart in these cases for the prompt abstraction of enough blood to allow the heart to regain its normal functional ability.

Pathology.

SOME OBSERVATIONS ON THE BACILLUS OF TUBERCULOSIS.—So many methods of observation and of staining the bacillus of tuberculosis have been suggested and recommended as possessing various advantages, that a systematic investigation of their comparative merits seemed to be necessary in order to the determination of the diagnostic value of each. Such an investigation has been very thoroughly carried out by Dr. Harold C. Ernst, of Jamaica Plains, Mass., and the results are given in the October issue of *The American Journal of the Medical Sciences*. These results have been obtained after the expenditure of much time in the preparation of the slides, much care in the selection and compounding of the staining reagents, and by the most careful comparison of the slides one with another.

As far as his experience goes, and Dr. Ernst has tried every method of staining that he has been able to find mentioned, Koch's and Ehrlich's methods are the only ones upon which reliance can be placed under all circumstances. With neither of them has he succeeded in finding an organism besides the bacillus of tuberculosis which would resist the decolorizing action of nitric acid, and which would not take the contrast color. Therefore, as all the others seem to be untrustworthy from a diagnostic point of view, one of these two methods, especially that of Koch's, should be used in all investigations upon this subject. Unless one of them is used, every observer is liable to the error of mistaking other organisms for the bacilli of tuberculosis, or to the still greater one of failing to detect it in places where proper methods of manipulation make its presence very manifest.

As far as the observation of Dr. Ernst extends, the fact of the occurrence of a peculiar form of bacillus in tuberculous lesions is an invariable one. He has never met with a case which could be considered tuberculous in which he has failed to find bacilli in larger or smaller numbers, and examinations, yield-

ing negative results as regards the occurrence of bacilli with the special staining reaction of the bacillus of tuberculosis, have been made in a large number of cases of sputa from other diseases than tuberculosis.

Dr. Ernst also narrates a series of inoculation experiments, which he made with great care, with pure cultures of the bacillus tuberculosis, and in all but one case, in which no result was obtained, the characteristic bacilli were found, thus constituting confirmatory evidence of the specific nature of the bacillus of tuberculosis.

INJECTION OF FINELY POWDERED INORGANIC MATERIAL INTO THE ABDOMINAL CAVITY OF RABBITS DOES NOT INDUCE TUBERCULOSIS.—When Koch first announced to the world his discovery of the tubercle bacillus, and gave an account of the experimental evidence which had convinced him of its essential etiological relation to the disease tuberculosis, it was natural that conservative physicians should demand additional evidence and confirmation from other sources before accepting his conclusions, notwithstanding the reputation which he had already established as an expert and conscientious investigator. Hence Dr. George M. Sternberg was led to study the *modus operandi* of the bacillus in producing tuberculosis, and ascertain whether its pathological power resulted from its simply acting as a mechanical irritant or depended upon specific physiological characters peculiar to it. The result of his important investigation, which was made in the biological laboratory of the Johns Hopkins University, appears in the January number of *The American Journal of the Medical Sciences*. He injected into the peritoneal cavity of a number of rabbits thoroughly sterilized, powdered glass and marine blue, taking every precaution to avoid the dangers and possibilities of accidental infection, and the results gave no support whatever to the claim that tuberculosis may be induced by the presence of finely powdered inorganic particles, or to the view that the tubercle bacillus induces tuberculosis by acting simply as a mechanical irritant.

Surgery.

RACHITIC DEFORMITIES OF THE LOWER EXTREMITIES—THEIR SURGICAL MANAGEMENT.—Dr. V. P. Gibney (*Medical Record*) discusses this subject. Many cases of knock

knee and bow leg recover without interference of any sort. What cases shall be left to nature? Children under two years of age should not be subjected to operation for these deformities unless the deformities be very great. Nor need children under three years be operated upon in moderate cases. As these deformities are due to rickets, much may be expected from general medical treatment, by such measures as improve digestion and general nutrition.

When should manual force and retentive splints be resorted to?

In cases such that attention cannot be given the child, and the proper instruments cannot be bought. Second, when there is but little time to effect a cure. Third, where the bones will yield readily to such force, the other conditions being present.

So far as bow legs are concerned, Dr. Gibney follows the principle that if the bones could be sprung into position by the use of a moderate degree of force, a retentive apparatus, consisting of springs, could be applied with benefit. If the femur is curved and the inner condyle unusually long in a case of knock knee, he tests with his hands the ligaments of the knee and the femoral curve, and is guided by the result in his selection of cases for apparatus. The age beyond which he found this test failing was four and five years. All springs now in use are constructed upon one principle, namely, force brought to bear against the convexity of the curve at its apex. About 30 per-cent. of the cases of genu valgum are cured by mechanical appliances.

Osteotomy has become applicable to nearly all rachitic deformities of the extremities. The writer gives the following as lessons taught him by experience:

1. Exaggerate the correction of the deformity.
2. Examine the limb at the end of a week and ascertain whether the amount of the correction gained is the amount desired.
3. Do not hesitate to refracture by manual force if necessary.
4. With strict attention to details in operating and in the use of good plaster of Paris splints, cases can be treated in dispensaries nearly as well as in hospitals.
5. In dispensary cases do all the operating you propose at one sitting.

The practice of Listerism possesses decided advantages, especially with reference to cleanliness. Support the limb three months.

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Original Communications.

Massage.

READ BEFORE THE DETROIT ACADEMY OF
MEDICINE BY WM. B. SPRAGUE, M. D.

THE French word *massage* and our word *massage* are derived from the Greek *μασσω*, which means *I knead*. With many it has come to embrace not only kneading and friction of the tissues, but also that form of treatment known as Swedish movements, which consists in passive exercise of the joints and contractions and relaxations of the muscles. I do not think this confusion of terms either necessary or desirable. By it we lose the etymology of the word and confound two treatments as distinct as are bleeding and cupping.

HISTORY.

Both massage and Swedish movements have their origin in methods as old as medicine itself, the history of which, indeed, is inseparable from that of medicine itself. Among the oldest of Chinese writings is the *Cong-Fou* of *Tao-Sse*, which is a treatise on the treatment of disease by exercise and manipulation of the body. A copy of this work is possessed by Dr. Kellogg, of Battle Creek, in this state, sent to him by a missionary to Chiha. It is filled with illustrations of the different movements and attitudes, which are described, and is a very interesting study. Père Joseph Amiot, a Jesuit missionary to China from 1750 to 1794, gives a lengthy explanation of their principles and methods. He says: "The physical and physiological principles concerned seem to be these: The mechanism of the body being entirely hydraulic, with a free circulation of the fluids health consists only in the proper equipoise of these fluids in their reciprocal relations, and to restore health, this equilibrium must be established. As the circulation of the fluids of the body has to overcome the two great obstacles of weight and friction, all that tends to diminish these aids to establish the circulation which is disturbed.

The disciples of the *Cong-Fou* enter into very lengthy details in order to show the sympathetic correspondence of the different parts of the human body, the action and reaction of the great organs of the circulation, of secretion and of digestion of food. They regarded the *Cong-Fou* as a true exercise of religion, which, by curing the body of its infirmities, liberates the soul from the servitude of the senses, and gives it power of accomplishing its wishes on earth, and of freely elevating itself to the perfection and perpetuity of its spiritual nature in the *Tao*, the realm of the great Creative Power."

Similar opinions and practices prevailed among the inhabitants of India, and beginning thus, with the Aryan division of the Caucasian race, it has descended through its different branches, prescribed and practiced by such physicians as Hippocrates, Asclepiades, Celsus, Galen, Oribasius, Paracelsus and Paré; administered to such sages as Socrates, Caesar, Cicero, Hadrian and Pliny; and its virtues recorded by Herodotus, Plato, Strabo and Plutarch.

P. Henri Ling deduced a science of "movements" from the hitherto unsystematic methods among his predecessors, and called the system "Swedish Movements." In the early part of this century, many establishments, called "Movement Cures," were afterward started in Sweden and adjacent countries, and machinery was invented and introduced in some of them. Dr. Geo. H. Taylor, of New York, now has such an institution in which nearly all the movements are given by machinery. If Ling taught the massage, it has since been dropped from the Swedish movements.

Massage was so nearly lost to sight for some centuries, that it has been supposed by many in our day to be a modern invention, but there have been *masseurs* in every age, many of them Empirics, however. Graham quotes Estradère as saying in 1863: "Although numerous observations upon the benefits of massage in certain affections have been communicated to the Academy of Sciences and other learned societies; * * *

although Recamier and his pupils, Séguin, Maisonneuve had lectured upon massage before all the learned societies; although in these times the most distinguished physicians of Paris very often prescribe massage; yet for all that it is under the domain of empiricism. because physicians are content with indicating its therapeutical results without interrogating anatomy and physiology for the reason of these results. Nevertheless, this age has a tendency toward improvement, and already some physiologists have given some satisfactory explanations of the effects of massage, passive and mixed movements." Drs. Playfair and Mitchell have given a new phase to this method of treatment in the eyes of those very orthodox physicians who "think it would be better that patients should remain invalids rather than be cured by any such means, which to their minds savors too much of quackery." It is steadily and rapidly gaining a popularity which will give it a very important place in our therapeutics.

PHILOSOPHY.

As yet very few more rational explanations have been given for the benefits of massage than that found in the *Cong Fou*. With no better knowledge of the circulation than that possessed by the Chinese, Hippocrates called the process *'ανατριψις* (a rubbing up), and says: "The physician must be experienced in many things, but assuredly also in rubbing; for things that have the same name have not always the same effects. For rubbing can bind a joint that is loose, and loosen a joint that is too rigid—can make flesh and cause flesh to waste." Also, "friction can relax, brace, incarnate, attenuate." It was a remarkably acute observation that led to such correct conclusions, particularly that the rubbing should be toward the heart, with his limited knowledge of anatomy. This latter point is too often ignored by would-be masseurs of the present day.

With all our knowledge we are but little better prepared to define accurately the influence of treatment than was the father of our profession, for the great problem of life and nutrition remains unsolved. But we do know that in dilatory circulation of the blood the stagnation is principally in the veins, resisted, as the Chinese said, by weight and friction, and that, many of the veins being superficial, rubbing from the extremities toward the heart will quicken the circulation. We know also that in some way the circulation in the lymphatic system bears a close relation to the

nutritive processes, and that this circulation is abetted by squeezing, pressing and percussing the tissues through which it ramifies.* We have learned that friction and percussion of the skin will increase the peripheral capillary circulation, and we believe that engorgement of intestinal organs is often relieved by such increase. Observation tells us that we can augment the nutritive processes in any part by frequent stimulation of the circulation as above mentioned. If the tissue be muscular it will gain tonicity and firmness, and it is thus that "rubbing can bind." We have seen also that "rubbing can loosen" in the case of joints and cavities distended with exudations, by promoting absorption. Weir Mitchell has taught us in these later days that rubbing "can make flesh." (See "Fat and Blood"). Zabłudowski has proven that massage increases the excretions, and so it can "cause flesh to waste" in gross and torpid organisms. "Kroneker and Sterling have shown that muscles, when fatigued, can be tetanized by much less frequent irritation than when fresh and rested. A fresh muscle that receives six irritations per second passes gradually from its intermittent contraction into that of tetanic contraction. Later, upon fatigue, this will be less. If the muscles are allowed to recover by rest alone for a short time, upon renewed irritation they very soon pass into a tetanic condition. If, however, during the same pause for rest, the muscles have been *masséed*, then their motility returns, so that they have the power of contracting a great many times, often one hundred. According to this, massage is considered by these observers to act as a perfect *perfusion*, bringing nourishment to the muscles, and thoroughly removing asphyxiated juices from them" (Graham on Massage, page 66). Zabłudowski found that the "muscles of uninjured frogs were exhausted by a series of rhythmic contractions caused by an induced current. Under massage they soon regained their lost vigor, so that the contractions were almost equal to the first, while a rest for the same time, without massage, had no effect. These experiments showing the restorative effects of massage upon wearied muscles, were more than confirmed in man by the same investigator. He found that after severe exercise a rest of fifteen minutes brought about no essential recovery, while after massage for the same period the exercise was

* Prof. H. P. Bowditch, in proceedings of Amer. Acad. of Arts and Sciences, paper on "Lymph Spaces, etc."

more than doubled. One person experimented upon, lifted a weight of one kilogramme (2.2 pounds) 840 times, at intervals of one second, by extreme flexion of the elbow joint, from a table upon which the forearm rested horizontally, and after this he could do no more. When the arm had been *masséed* for five minutes he lifted the weight more than 1,100 times in the same manner as before, without fatigue. The difference in muscular sensation was very striking after rest alone, in comparison with that after massage. There was unvarying stiffness during a pause of five minutes for rest; on the contrary, after five minutes' massage the muscles were supple and pliant" (Ibid).

In a repetition of Zabludowski's experiment upon myself, I found that I could raise a three-pound dumb-bell 2,020 times in as many consecutive seconds, but there the power to raise it so rapidly, ceased. After massage of the wearied arm for a period of fifteen minutes, I raised the same bell in the same manner 2,300 times in 2,300 consecutive seconds, and do not know how much longer the process could have been continued, for I was interrupted in the experiment. The massage was succeeded by a feeling of rest and vigor superior to that with which the experiment was begun, and no soreness or stiffness of the muscles succeeded the experiment. Two days later I repeated the experiment, but without the massage. The first exercise was of the same duration as in the first experiment, and was followed by fifteen minutes of rest. Then a second effort succeeded in rising the bell only 1,185 times. The whole of the second effort was painful because of the soreness of the muscles, and this soreness remained for hours after the completion of the experiment.

In another experiment I raised a six-pound dumb-bell, by extension of the whole arm from the side to a right angle with the body, without the slightest flexion of the elbow, 130 times in three minutes. After fifteen minutes of simple rest, I could only raise the same bell 35 times in 40 seconds. I then had a massage for fifteen minutes, directed chiefly to the extensors of the arm, after which I raised the bell 70 times in 85 seconds.

Zabludowski's subject was an expert for experiment. The will may have influenced my results somewhat, but with all allowance for this factor, they are a confirmation of the general nature of his conclusions.

Are we followers of Hippocrates? True Hippocratism consists in facilitating and

imitating nature's process. What, in the range of our therapeutics comes nearer it than this?

MECHANISM.

I know of but one description of the process that is at all complete, and that is found in the only treatise on massage that is published in our language, I believe. That treatise is by Dr. Douglas Graham, of the Massachusetts Medical Society, and I have already made several extracts from it. I will attempt an original description because I think even his method may be improved, and because his description is too lengthy to quote. In my efforts at brevity I have tried to avoid obscurity, but I have not always succeeded.

For the purpose of systematic teaching, as well as for mental and physiological effect upon the patient, I have named the parts of the body in the order that they are to be manipulated, and have arranged a series of movements to be followed in the order given. I divide the body into four divisions, seventeen sections, and eighty areas. The divisions are the upper extremities, lower extremities, head and trunk, respectively. The sections of the first division are hand, forearm, and arm respectively. Of the second, foot, leg and thigh. Of the third, cranium and face. Of the fourth, chest, abdomen and pelvis. The respective areas are the anterior and the posterior surfaces of each finger and toe, and of each section, except the second and third of the second division and the two of the third division. The first area of the leg is included between the internal border of the tibia and the median fibres of the soleus muscle; the second between this line and the fibula; and the third between the fibula and the tibia. In the thigh the three areas are of about equal extent and may be described as anterior, internal posterior and external posterior. This special arrangement is necessary because of the large circumference of the leg and thigh, and to operate the groups of muscles individually. In the fourth section the areas are right and left as well as anterior and posterior, and of course we have both right and left anterior and posterior areas in each of the other sections.

Slight deviations are necessary for particular cases, as, for instance, in case the joints are the parts where treatment is indicated, they constitute special areas. Otherwise they are the lines of separation between the sections and are manipulated with them.

Again, if the legs are very small only two areas are made of each section, and there are certain movements which do not admit of this classification. Each division may receive the whole series of movements before proceeding to the next division.

Prof. Von Mosengeil names only four varieties of motion, viz: *effleurage*, *massage à friction*, *petrissage* and *tappotement*. I prefer a series of movements in which superficial alternate with deep, and the heavier are preceded and followed by lighter movements. This *crescendo* and *diminuendo* of force should also be a characteristic of each kind of motion. The movements should all begin at that part of the respective areas most remote from the heart, and be directed toward that organ (*αναρπίψις*). The order of movements which I have chosen is *friction*, *flagellation*, *stroking*, *wringing*, *percussion*, *kneading*, *seesawing*, *twisting*, *vibration*, and *smoothing*.

In *friction* the right hand of the *masseur* should be applied to the right hand of the patient, and the left to the left, in such a way that the fingers shall adapt themselves to the depressions between the fingers, the concave palm to the convex dorsum, and the convex thenar prominence to the concave palm. The latter application should be a semi-circular pushing motion, and vigorously performed. The others toward the heart, and at the rate of 75 to 150 per minute. The wrist may be embraced in the second section, and it will be found here, as elsewhere, that the unevennesses of the hand can be most admirably adapted to the irregularities of surface in the body. The whole palm should be applied to the surface of the arm, the inner surface first that the larger veins may be emptied preparatory to disgoring the smaller veins and capillaries. The motion should resemble that of the carpenter in shoving his plane, and the rapidity from 50 to 100 per minute. In the return move the hand should lightly touch the surface, giving a soothing effect. Each area should receive a half-dozen sweeps. The third section should be from elbow to shoulder inclusive, and similarly done. The feet may be done transversely, the legs and thighs the same as the arms. On large surfaces both hands may be used. On the head, friction, if applied, should be light. On the chest it should be directed from shoulder and axilla to sternum anteriorly, and from occiput to spine of scapula, and in the intercostal spaces toward the spine, posteriorly. In the abdomen there should be two distinct motions

anteriorly, one from the cœcum in the direction of the ascending, transverse and descending colon, the other from the respective sides to the linea alba. Posteriorly it should be toward the spine. Certain of these parts will be benefitted by vigorous rubbing, and the one hand can be reinforced by the other, as the carpenter steadies his plane.

Flagellation is performed by rapidly striking the surface with the ulnar border of the hand, the fingers being so relaxed that more than one shall whip the surface at each stroke. Both hands should work in rapid alternation, the rapidity being from 150 to 250 with each hand. Several whalebones fastened to a handle and in a plane, as the fingers are to the metacarpus, and each covered with a piece of rubber tubing, are better than the hand for this movement.

Stroking is a shorter, quicker movement than friction, and the hand sweeps down like a hawk upon its prey, the fingers and heel of the palm touching lightly, while the principal pressure comes from the metacarpal portion. The two hands should participate in alternation with a rapidity of 75 to 100 per minute for each. This is the *effleurage* of Von Mosengeil, and is particularly useful in dispelling effusions.

Wringing is the best expression I can find for a movement like that of wringing clothes. The tissues are grasped firmly, either by the thumb and finger or by the two hands, according to the size of the part to be manipulated, and without allowing the hands to slip on the skin, they are carried in opposite directions as far as possible and immediately returned to the opposite extreme, the hands slightly advanced and the movement repeated until each section is covered in its turn. On broad surfaces the movement must be considerably modified, and the areas cannot be accurately observed. The pressure should be sufficiently heavy to move all the tissues overlying each bone.

Percussion consists in vigorous sparring with the broad palm of the hand, the two hands alternately, rapidly and rhythmically. It is a distinctly surface movement and should induce redness of the skin.

Kneading is the most essential movement. Properly administered, it evacuates the capillaries, veins and lymphatics and produces malaxation of the tissues. The second phalanx of the forefinger should oppose the thumb for scant tissues and the palmar surface of the distal phalanges should resist the thenar eminence in grasping the more abund-

ant, the two hands working on either side of a line bisecting each area longitudinally. The grasp should be firm in proportion to the amount and toleration of the tissue embraced, and should alternate between the two hands, each a little in advance of, and lapping upon the field of the preceding, being but little more than instantaneous. Never stretch the tissues in opposite directions at the same instant. The abdomen should receive a special kneading anteriorly as described for friction. In many cases it will be necessary to knead the pelvic organs through the abdominal walls. The direction should usually be toward the diaphragm, to elevate the organs. Of rectal and vaginal massage of the uterus I will speak later. The glutei muscles (the right and left posterior pelvic areas), may be considerably benefitted by this movement, flagellation and percussion—only slightly so by the other movements. Where the tissues cannot be readily grasped, as over the head, ribs and shoulder-blades, the desired effect may be produced by a series of circular, twisting motions done with the heel of the palm. For the tissues lying on either side of the spine, the ends of the fingers may be used similarly.

See-sawing is an adjunct to kneading and will take its place upon the *ligamenta supra-spina et nucha*, but is essentially superficial. One or both hands should participate according to the area, (the ulnar borders being parallel to each other and transverse to the area), and perform the motion described in the name.

Twisting is a movement allied to wringing, the hands grasping the tissues in the same manner, but they should move in the same instead of in opposite directions. The tissues are thus moved more *en masse* and suffer less compression, but the motion being more extensive more stretching of the muscles and ligaments is accomplished.

Vibration accelerates the circulation which at this stage has become quite free, and the movement is peculiarly agreeable. It is accomplished in the extremities by taking the tips of the fingers or toes, directing the recipient to be wholly passive, and transmitting a rapid vibration of the operator's hand upon the wrist to the whole extremity of the patient. For the abdomen the hand is laid firmly upon the anterior wall and a very rapid lateral vibration of the hand is transmitted to the extent of producing undulations of the walls. This is a good excitant of peristalsis.

The movement is rarely applicable to other parts.

Smoothing extends its influence chiefly to the nerves, and is used as a sedative. It should be gentle and slow and applied from the head downward.

The muscles of the recipient should be as relaxed as possible during the whole process. The *masseur* should quickly learn the easiest postures and maintain them. The movements rarely extend above the wrist of the operator. The whole treatment should average about forty-five minutes. Ointments, oils, etc., are unnecessary to the treatment but may be useful as an emollient to a rough, dry skin, or as a nutrient. The touch of the manipulator should be so skilled as to avoid irritation of the skin or hair follicles without the precaution of lubricants or shaving.

Skill will increase with practice, even after years of experience. Even more than in surgery there must be that education of the muscles which will enable them to recognize the amount of resistance to be overcome, and still more important is that intellectual training which will enable one to appreciate the character and delicacy of motion which will be most acceptable to each individual case,—the tact, in short, which the charlatan calls magnetism. A good intellect is a necessity to a good *masseur*, notwithstanding the fact that some of the most successful have been ignorant quacks. A large amount of native tact has probably supplied the need in such cases. There is need that in these times as of old, the physician should himself be *able*, at least, to give a good massage, and, indeed, some of the best are doing it, as Mitchell, Playfair and Graham, and numerous German and French physicians.

UTERINE MESSAGE.

About two years ago my attention was called to Dr. A. Reeves Jackson's paper on uterine massage, which was published in the Gynæcological Transactions for 1881. I soon after arranged with him to give me some special instruction in his method and choice of cases. His instructions were even more modest than his paper, and I was deterred from attempting cases that I now believe (since seeing the reports of some of the German gynæcologists) might have been benefitted. The theory is very rational. It is recognized that in most derangements of the female generative organs there is serious interference with pelvic circulation, with frequent exudations into the

cellular structure of the region. These conditions are frequently causative, and even when secondary, they are serious obstacles to improvement. The removal of these obstacles is yearly becoming more and more the study of the gynecologist.

Dr. Taylor, of Swedish movement fame, has directed a series of movements toward the relief of pelvic congestion and strengthening of the uterine supports, and claims that his is the only rational method of treating uterine diseases. However much we are repulsed by his bigoted assertions, we cannot but acknowledge that his theory has many rational features if we investigate it with unprejudiced minds.

Dr. A. D. Sinclair claims to have availed himself of uterine massage in treating displacements some nineteen years since. Dr. Gustaf Norström published a report of 138 cases of chronic metritis, extending over the preceding two and one-half years, in 1876. The treatment was uterine massage, and he claimed 43 complete, besides many partial cures. There is an old German doctor in Wisconsin who has long had a wide reputation for performing wonderful cures in womb diseases, and who holds his methods of treatment as a secret. I learned from one of his former patients that his treatment consisted largely in abdominal and vaginal manipulations of the womb, and that he had suffered amputation of an index finger that this treatment might be facilitated.

Dr. Otto Bunge reported a series of cases in 1882, in which he had obtained almost unparalleled results from massage in endo-, peri- and parametritis, and displacements with adhesions, many of them cases in which Jackson would forbid its use. Experience has taught him that the manipulations should be gentle, particularly so at first. At the last meeting of the German Gynecological Association, reported in the March number (1885) of the *American Journal of Obstetrics*, received since the above was written, Prochownick, of Hamburg, read a paper on "Massage in Gynecology," from which I extract the following:

1. "The employment of massage in gynecological therapeutics aims to aid absorption of transudations and exudations, to stretch cicatricial strictures and contractions, and thereby to remove deviations, also to stimulate the circulation in the above-mentioned affections, as well as in metritis and subinvolution.

2. "Massage should not be employed until

all other therapeutic measures have proved fruitless, because, on the one hand, it is painful and time consuming, often having to be protracted over months, and the patients, on the other hand, are more likely to consent to its employment, seeing that nothing is gained by other means and methods.

3. "The performance of massage requires very careful individualization based on a preceding, very strict bimanual examination. * * *

4. "Gynecological massage may be external and internal. The former is of more limited application. Nevertheless, it should always precede the internal to test the sensibility. * * * The flatly applied first phalanges of two or more fingers advance toward the parts to be masséed, pulling, crowding, or pushing them against the venter of the ilium, the rami of the pubic bone, or the surface of the sacrum, while the muscles of the abdomen are given the utmost relaxation in the recumbent position. All the remaining external manipulations belong to abdominal massage, which must often be associated with the gynecological, as it stimulates the circulation and regulates defecation.

5. "Internal massage may be active and passive. In the former, kneading or tractive pressure—the last-mentioned, chiefly in the treatment of cicatricial cords—is performed from the vagina, more rarely the rectum and abdominal walls; passive massage consists in the introduction of cylinders or balls of hard rubber, in the main resembling the well-known ones of Bozeman. * * * Passive massage alone is employed only for vaginal and cervico-vaginal cicatrices, at times also for muscular vaginismus. Otherwise it is used as an auxiliary to, or substitute for, active massage.

6. "Massage finds appropriate application in conjunction with bath cures and other treatment. * * * Prochownick often makes a vaginal application of iodine after active massage. Under such circumstances the drug proves effective, where before it has failed.

7. "Without exception, all acute diseases in the acute stages are contra indications. * *

"In two years Prochownick has treated 102 patients by massage * * * Five were cases of neoplasms, small tumors of intraligamentous growth. Two of them burst without any untoward symptoms and did not recur; one grew and was operated on. In two submucous fibroids there was no result. In descen-

sus and prolapsus, too, the result was negative. Of ten cases of intractable metritis and subinvolution, four were completely cured, and three improved. Of eighteen exudations, five of which were hematoceles, eight (two hematoceles) were cured, two improved so as to present no symptoms, three were slightly improved. In no case has P. observed recurrence of the inflammation. The most frequent cases which came under treatment, *i. e.*, 40 cases, were old cicatricial contraction of the remains of exudation and tumid cicatricial cords associated with deviations of the uterus and ovaries; twenty-four recovered completely, and eight did so in a clinical sense; only the palpable condition could not be called cured.

"Bunge, of Berlin, in general indorses Prochownick's statements. For the past four years he has observed favorable results from massage in the treatment of cicatricial cords, old exudations, and recent retroflexion, but not in metritis. He states that he is in the habit of facilitating active massage by grasping the vaginal cervix with the bullet forceps.

"Baumgärtner (Baden-Baden) said that he had had opportunities of convincing himself of the efficacy of the Swedish movement cure in gynecological cases.

"Winckel (Munich) has not thus far used massage in Prochownick's sense, but has devoted his attention to general massage according to Playfair's publications. It has been of interest to him, therefore, to study in the Orient, in Tiflis, the mode of employment of massage which is very much in vogue there. He passed around numerous photographs clearly illustrating the procedure there in use."

My own experience, while it corroborates that contained in these reports so far as it goes, is yet so limited as to be unworthy of a written report at the present time.

The October number of *The American Journal of the Medical Sciences* contains a report from Prof. G. Antal, of the use of massage for stricture of the urethra with periurethral indurations. He began the treatment about a year ago, and gives a summary of six cases in which the results are equally good with the gynecological reports given. He practiced this method exteriorly, from eight to ten minutes every day.

ELECTRO-MASSAGE.

There is a magneto-electric machine made in New York, which is intended for giving

massage and faradization together. It is called an electro-massage machine, and the name suggested that it would be an excellent addition to sanitary apparatus. But I was disappointed upon receiving and trying it to find it awkward, heavy and harsh, and illy adapted to any but the broadest surfaces. But I had conceived certain advantages from the combination of the massage with electricity and set about finding a better device. I made a forked conducting cord with a wristlet of conducting material attached to each prong, and a broad plate attached to a straight cord. Placing this plate between the shoulders of a patient and attaching the wrist electrodes to the wrists of my *massusee*, I connected the cords of the poles of a faradic battery, and told her to proceed with the massage. The current was regulated to a pleasant strength for both administrator and recipient, and the treatment was very much enjoyed. As the massage proceeded the plate was changed to the region of the nerve centres controlling the parts operated on, or if the region of the nerve centres were under treatment, then the plate was placed at some part of the peripheral distribution. Of course the strength of the current was varied according to the part treated.

Knowing by experience and observation of the benefits to nutrition, both from general faradization and from massage, I reasoned that a combination of the two would be still more efficient, and the results obtained have, I think, justified this expectation. I believe that electricity acts as an auxiliary to nerve force, particularly to the trophic system, and that the favorable conditions supplied by massage increase the efficiency of the one as of the other. I might quote several cases which seem to support this view, but as this paper is already too lengthy, I will reserve these reports as those of the other methods herein described, to a future occasion.

I do not presume that I am exempt from that frailty of human nature, by whatever name it should be called, which causes us to be unduly prejudiced in favor of those methods with which our experience has been identified, but after all due allowance on this score, I cannot doubt that we have in massage and allied treatments, methods for alleviating chronic disorders depending on or resulting in innutrition, superior to those which are most in vogue, and I think I can see a consent to this view yearly assuming greater proportions in the profession at large.

Hæmaturia.*

BY LEWIS E. MAIRE, M. D., DETROIT, MICH.

HÆMATURIA, as the name indicates, signifies blood in the urine; this blood may be obtained either from the kidneys, ureters, bladder or urethra.

Among the causes of hæmaturia may be mentioned local injury, either from external force, or severe straining, or from local injury caused by the presence of a calculus in the pelvis of the kidneys, ureters, or bladder, as the case may be. Again, local lesions may be causative, as the hæmorrhage which sometimes attends Bright's disease, abscesses, congestion (both active and passive), cancerous and tuberculous degeneration, polypoid and villous growths in the bladder, diseases of the prostate gland, and varices of vesical veins. Cystitis may also cause hæmorrhage as may also rupture of the erectile tissue and urethra of the penis.

During the course of some of the continued fevers, and in the peculiar state of the circulating fluid in such diseases as scurvy and purpura, and the hæmorrhagic diathesis, we may find occasionally indications of blood in the urine. Blood may appear in the urine vicariously, being substituted for the menstrual flow. This has also been noticed in cases of spasmodic asthma. Some few cases have been reported where mental emotion has seemed to have caused hæmaturia. In very hot climates, a peculiar form of hæmaturia exists in the form of an endemic; this occurs in Egypt, Brazil, and the southern part of Africa. The cause of this trouble is due to a peculiar entozoon called "Bilharzia hæmatobia," in honor of Bilharz, who first discovered their presence while studying the disease in Egypt. Hæmaturia may be produced by over-doses of certain drugs and medicines, such as cantharides, turpentine, etc.

Having discovered blood in the urine, our next step is to determine the location of its source; this may be done by a careful study of the history of the case, and an examination of the urine. Under the microscope the blood corpuscles may be distinctly seen, especially if the urine is acid; but if the urine is ammoniacal, or the proportion of water much increased, their presence is very transient. Another peculiarity is, they never form rouleaux in the urine. Sometimes the corpuscles have a shrivelled or serrated appearance.

In hæmaturia the color of the urine will

depend, to some extent, on the location of the point of hæmorrhage; if the hæmorrhage is of renal origin, the appearance of the urine is of a dark, brownish-red, cloudy color, while if in the ureters, the urine is more red in color, and is more apt to contain elongated clots, which form in the ureters. As a general thing, no clots will be found in the urine when the hæmorrhage takes place in the kidneys. Unless the hæmorrhage is profuse these clots will form in the ureters and cause pain during their passage similar to that of the passage of a calculus. There will be found to be more subjective symptoms referable to the kidneys, such as the feeling of weight, heat and pain, which is much intensified on pressure; more or less tube-casts will also be found on examination. Sometimes pain and retraction of the testicles accompanies hæmorrhage at this point.

Where the point of hæmorrhage is located in the bladder, the stream of urine is at first very slightly, if at all, tinged with blood, towards the last the urine becomes more bloody, and finally may consist of pure blood, in liquid or clotted form; in these cases a great deal of vesical irritation and pain is apt to be present, the pain being well marked over the pubes; there is also some smarting of the urethral canal. In some cases the amount of clot may be sufficient to cause retention of urine. In one patient I had under my care, the desire to urinate was followed so rapidly by the act as to keep his clothes continually wet.

In hæmorrhage from the urethra the blood makes its appearance independent of the urine and appears in the form of a stream or a succession of drops. This, however, will vary according to the location of the point of hæmorrhage; if located towards the meatus no difficulty of diagnosis will occur, but if located in the membranous portion near the neck of the bladder the blood may find its way into the bladder, and becoming admixed with the urine may mislead us in the diagnosis.

PROGNOSIS.

The prognosis of hæmaturia will of necessity vary, being dependent on the cause, or, in other words, it may be stated as a general rule that the prognosis of hæmaturia is the prognosis of the pathological condition causing it. The simple fact of finding blood in the urine is not necessarily of evil omen.

TREATMENT.

The treatment of hæmaturia will depend to

*Read before the Detroit Academy of Medicine.

a large extent upon the cause. If due to external injury, rest must be enjoined; indeed this will be found necessary in all cases of hæmaturia. Opiates, if required, and relieving the bladder of accumulated urine, so as to prevent fermentation. In active hyperæmia of the kidneys local depletion by the use of wet or dry cups over the region of the kidneys will be found useful together with active purgation. In the passive form of congestion general stimulants and tonics will be found more useful, such as sulphuric acid, tinctura ferri mur., and the careful use of turpentine.

In cases of cancerous or tuberculous degeneration not much can be done, our attention being directed to prevent hæmorrhage as much as possible. The agents we use to attain this are rest, cold applied in the region of the diseased part, either in the way of external application or injection into the bladder, and the use of astringents or hæmostatics, such as ergot, gallic acid, digitalis, plumbi acetat., tr. ferri mur., alumen in solution and injected into the bladder, and turpentine where the hæmorrhage is not of renal origin. In one case I have been treating recently there seems to be a weakened condition of the sphincter vesicæ attending the hæmaturia which was due to varices of the vesical veins. I added to the above remedies strychnine and belladonna in appropriate doses with marked advantage.

In the treatment of hæmaturia due to entozoa, I have no experience. The treatment recommended by Dr. John Harley, who studied the disease among the inhabitants of the Cape of Good Hope, is the one used. He recommends a draught consisting of fifteen minims each of oils of turpentine and male fern, with five minims of chloroform in two ounces of tragacanth mucilage, to be given every morning. Where these entozoa were located in the bladder, he injected a solution of twenty to thirty grains of iodide of potash to five ounces of tepid water every second or third day.

In hæmorrhage of the urethra very little difficulty, as a rule, will be encountered. Astringent injections, the application of cold and compression by means of card-board held in place by a number of elastic bands, will be found all that is required as a rule.

Three new uterine speculums are to be introduced to the profession at New Orleans, April 28th, 28th, etc.

Tuberculosis.

PAPER READ BEFORE THE DETROIT ACADEMY OF MEDICINE, BY FRANK H. FARNUM, M. D.

I believe this subject has not been before the Academy lately, and considering the amount of space devoted to it in our medical journals, and the radical change it may make in some of our long honored theories, I think it will be quite as interesting and profitable to hear the subject discussed from a clinical standpoint, as from a strictly scientific one. I will only call your attention to two or three points which are of practical interest to the physician. The technique of cultivation and examination is not of especial interest outside of the laboratory.

Most authors when speaking of the aetiology of this disease, attribute about one-quarter of the cases to hereditary predisposition, and in looking over a number of works which treat at some length of heredity, I fail to find what this term actually means, or rather what the pathological condition is when this term is applied. Flint, in his article on causation of tuberculosis, says in regard to heredity, "why a peculiarity of constitution rendering a person specially liable to the development of this disease should be transmitted from parent to child, cannot be explained more than the fact that peculiar traits of physiognomy or mental character are inherited." This condition, acknowledged by all to be the most favorable for the reception of tuberculosis, may be an important factor in settling the much disputed question as to the limits of contagion, and the condition under which a subject will receive and nourish a tubercle bacillus. Very few to-day deny that this disease is contagious within certain limits. As yet those conditions and limits have not been satisfactorily pointed out, and as hereditary predisposition is the most common and favorable state in which to receive this contagion, it will be well to find the exact pathological conditions pertaining to it. Bartholow says heredity is concerned to the extent that the type of pulmonary tissue favorable to the development of this disease is transmitted, * * * and next to heredity, chronic bronchitis is the most influential factor.

From a pathological standpoint I do not think these conditions are very dissimilar; in other words, heredity is coming into this world with a very delicate and irritable mucous membrane lining the air passages just as we inherit a delicate skin, or deficient osseous organization. This membrane is usually

prone to inflammatory attacks, and owing to its deficient anatomical and physiological construction, it is not able to withstand the ordinary irritants which come in contact with its surface in the acts of respiration. If we may assume that the above are the conditions which come under the head of heredity we have a state quite analogous to chronic bronchitis. Reasoning from this point, we can easily see how and to what extent this disease is contagious. It would lead us to believe that the bacilli are only introduced into the system through a diseased surface, but when once established, their presence alone serves to produce a condition in the surrounding tissue favorable to the propagation, and the progress of the disease is slow or rapid, according to the subject's vitality and power to withstand those inflammatory changes necessary to the development of the disease; as we see in Baumgarten's article on latent tuberculosis, he found traces of tubercular deposit in every third or fourth cadaver, dead from other causes than tuberculosis. This would lead us to believe that this decrease in its incipient stage is much more common than is generally supposed, and many people are infected who never manifest any physical signs. The introduction of a perfectly clear culture of tubercle bacilli into the system of many of the lower animals, has proven beyond doubt that among them it is eminently contagious, and it has only remained to be seen if it was equally so among the human race, and fortunately for those interested in the investigation of this subject, a perfectly healthy female, with no family history of tuberculosis, has become accidentally inoculated; localized tuberculosis has rapidly supervened, and later the lymphatics in the neighborhood became infected, which, upon extirpation and microscopical examination, show the characteristic tubercular growth and tubercle bacilli. The progress of this case will be quite interesting, and perhaps serves as a warning to those engaged in making post mortem examinations.

Fernet in a later article says that primitive genital tuberculosis may be caused by direct contagion in sexual intercourse and thinks many cases of indolent blennorrhœa in the male and leucorrhœa in the female are due to this infection. If this is so, which in some cases may be proven by the detection of the specific microbe, the subject should be discouraged from participating in this family indulgence. True, it is less serious than a pulmonary inoculation, as we are able to apply such agents to the diseased parts as

will effectually destroy the germs before the disease becomes general, and as a usual thing it remains local a considerable time after inoculation, and frequently produces death without ever becoming general. So that it would be reasonable to believe that if we have a tubercular growth comparatively recent so situated that it may be entirely removed, the prospect for its eradication is good.

Among the numerous cases of surgical tuberculosis we have those which have become so by direct contagion, the diseased tissue being exposed to the atmosphere. There are others in which the manner of infection is quite obscure, but I think post-mortem examinations with strict attention to detail will throw a great deal of light upon this now somewhat obscure subject.

Why we do not have more surgical tuberculosis may perhaps be explained from the fact that tubercle bacilli will not grow except between about 90° and 105° F., and moist surfaces exposed to the atmosphere are usually below that point. At least this subject is considered of enough importance by the Austrian Government that it has issued an order that patients suffering from tuberculosis shall not be admitted to the general wards.

The statement made by some men, especially Formad, of Philadelphia, in regard to producing tuberculosis by the injection or inhalation of indifferent material, such as glass, hair, etc., seems to me to be without evidence. It is true tubercle in the literal meaning of the word may be produced by the injection of perfectly sterilized material, which acts purely as a mechanical irritant, but a tubercle thus produced is altogether devoid of the most important property of a true tubercle, namely, auto-infection.

Formad's explanation of heredity, so far as fibroid phthisis, or those cases in which the primary cause is the inhalation of finely-powdered organic material is concerned, seems quite plausible, but as phthisis is now classified, fibroid is as distinct from tubercular phthisis as pneumonia from either, although tuberculosis may be a complication of both.

31 State street.

Dr. T. Lauder Brunton says that a glass of cold water, slowly sipped, has more effect upon the pulse than a glass of brandy swallowed at a draught. The effect of the sipping of water ceases when the sipping stops.

Hypertrophy of the Prostate.*

BY C. C. YEMANS, A. M., M. D.

THE gland standing at the gate is peculiarly a male organ of generation, and reaches its highest development in man. In apes it resembles for the most part that of man, though in a less developed condition. In the Cheiroptera it is divided into lesser globules. It is distinct and cylindriciform in most carnivora. It is frequently, however, but slightly developed in the otter. In the horse the gland has two cornua, and consists of large sacs; in the ruminantia, and in the hog it is represented by a very thin glandular layer. In the cetacea it forms a single large mass, which surrounds the urethra in the form of a ring. The greatest development of the prostate is exhibited by many rodentia and insectivora. Thus there is found in the hibernating dormouse a tuft of cœcal tubes or a round sac, as in *sorex*, or a large knotty tuft of gland, as in the castor. In *dipus*, besides a pair of large, simple cœcal tubes of unequal size, there is found a pair of lesser lobed glands. Its development is perhaps greatest among our indigenous animals, in the hedge-hog, where the posterior pair always consists of six lobes with very long contorted cœcal vessels united by cellular tissue, the anterior pair being represented by a tuft of divided cœcal canals. The elephant has two pairs of divided vesiculæ seminales, and among the rodentia there are animals, as the rat, in which there are as many as three pairs of prostate glands.

A paper was read before the Wayne County Medical Society, by Dr. Wyman, on "Tenotomy of the Levator Prostatæ Muscle," as a method of treating enlargement of the prostate gland with retention of urine.

I produce this paper for the purpose of further calling the attention of the society to this method of treatment, and to provoke discussion regarding the treatment of this common and fearful malady.

I call attention of the society to this subject so soon after the reading of the other paper, first, because of the well-known critical ability of the author, and, secondly, because of the importance of any knowledge which will assist us in relieving our suffering patients who are afflicted with this severe disease, which has, heretofore, baffled medical skill; and if this method of procedure shall alleviate the suffer-

ings of those afflicted with enlarged prostate, we ought certainly to know and to practice it.

The paper calls attention largely to the symptoms accompanying this disease, and to the dangers of some of the methods of treatment which are now used, especially catheterizing, which often brings with it very severe and sometimes fatal results.

The author concludes his paper with these generalizations:

The tendon of the levator ani muscle unites with the central tendon of the perineum, and invests the prostate gland in such a manner that when the prostate is enlarged, force is brought to bear upon it during efforts to vacate the bladder, which rotates the prostate upon the urethra, and shuts off the flow of urine.

A section of the perineum and its deep fascia and central tendon will remove the force expended by the levator ani muscle of the prostate, and permit the muscles of the abdomen and bladder to vacate the urine. Such a section implies tetonomy of what some anatomists call the levator prostatæ muscle.

An operation of this character involves a breaking up of the conditions and lymph spaces on the rectal and lateral aspect of the prostate, and if a wound is made to granulate from the bottom, atrophy of the prostate will follow, so that by the time the tendon of the levator prostatæ has re-united, no further difficulty in micturation will be likely to ensue."

These theorems are very important, and if correct, would lead to a complete change in the treatment of enlarged prostate with retention, a treatment very simple in its procedure and entailing no serious danger upon the patient. But these conclusions are drawn from the experience of one observer from one case, and therefore may be regarded with some degree of skepticism, upon the well known principle that to generalize from one fact is not always safe.

Query, is the prostate gland a generative or a urinary organ? It is a homologue of the uterus, and, as it has sometimes been said, the male uterus? It is regarded to have generative functions and to be a generative organ, so related to the urinary tract as to seriously interfere with micturation when swollen.

Is the levator prostatæ muscle so related to that gland as to rotate the prostate upon the urethra and cut off the flow of urine as alleged? If so, then by section the levator muscle would certainly, for a time at least, lose its power to rotate the prostate gland

* A paper read before the Wayne County Medical Society.

upon the urethra, and thereby impede the stream of urine.

What is the relation of the prostate to the urethra? Is it such a relation as would materially change by section of the levator prostatae muscle? For the mere hypertrophy of the gland will of necessity diminish the caliber of the urethra and so interfere with voiding urine. Is it necessary that the prostate should be rotated upon its axis that the caliber may be diminished?

I think the relation of the prostate to the urethra and the neck of the bladder are such fixed relations, that the section of the levator prostatae muscle can affect it but little at the most, and that this operation affords us but little grounds to hope that we have discovered some new and pleasant way of avoiding that which was before disagreeable and perplexing to the physician and torturing to the patient. However, hoping that the conclusions of the author were valid, having a case of hypertrophied prostate with retention and all that that implies, I thought it proper to operate by this method, as a last resort. I had several years previously operated upon this same patient by the lateral operation for calculus. The patient had been quite well until about six weeks before I determined to operate, when he took a severe cold, suffered intense pain, had to void his urine about once in fifteen minutes but was otherwise in good health. I treated him by the ordinary methods until the case became desperate, though there was no septicæmia nor uremia. I proceeded to again cut the levator prostatae muscle from its attachment to the raphæ, operating on the mesial line. The patient rallied from the operation well, but the pains recurred as soon as the effect of the chloroform was lost, and so continued until his death, four days later, having received no appreciable relief by the operation.

My one case, as compared with Dr. Wyman's happy results, seriously disappointed me, and I now entertain an honest skepticism in regard to this new operation, for I can see no change likely to occur in the relation of the prostate to the urethra by section of the levator prostatae muscle, either in theory or by my experience.

The Paris correspondent of the *St. Louis Courier of Medicine* says that the road to learning travelled by the medical students of that city, "seemed made royal with billiards, cards, wine, beer, and coquettes."

Orthopædic Practice.

CLINICAL LECTURES BY M. JOSIAH ROBERTS,
M. D., REPORTED BY DR. C. E. NELSON,
NEW YORK CITY.

[Opining that specialism is not always to be implicitly depended upon, or, in other words, it is in a certain number of cases useless, in others positively harmful, I am devoting a certain part of my time in observing the proceedings at Dr. Roberts' clinic. I know that a large percentage of orthopædic practice can be, with benefit, left out; it is doubtful if all orthopædist even know their anatomy; they certainly do not if they state that *extension* separates the supposed diseased articular surfaces. Clinically speaking even this may be a great error, as these surfaces may be healthy, while the diseased focus is seated in the centre of an epiphysis; it is perfectly impossible, by almost any amount of traction, to *separate* the articular surfaces. If separation be desired, all that is requisite is to flex the limb, anatomically speaking—which is not feasible in disease. This is a class of practice that will in all countries be lucrative; appliances of doubtful efficacy will be paid for, and put on; useless operations (such as excision, leaving a stiff connection) will be performed; and still much is left to be done. As Dr. Roberts says, in comparison with other fields, hardly any advance has been effected within the last twenty years, because "treatments" have been followed, being based on erroneous premises. So much error having been the rule and not the exception, I have taken the pains to go to Dr. R.'s clinic, and appear as a reporter; caring little if I can be of service, by my notes, to any sufferers. Dr. R.'s instruments, operations, and treatments are sufficiently well known to be passed over now; and attention directed to clinical remarks, as the cases come in; casual phrases often, during a dry lecture, make a lasting mental impression, when the main body of the lecture itself is forgotten before the hour is over.—C. E. NELSON.]

(The following are disjointed phrases, but of clinical importance. The phrases within brackets are my own interpolated remarks.—N.)

[Patients keep continually presenting themselves with plaster jackets inefficiently put on—consequently, not only useless, but injurious.] On taking off these jackets for purposes of examination, the patient seems to be unreasonably sensitive; but the truth is that after a plaster jacket has been on a long time

without taking off, the skin is found to be in a state of hyperæsthesia. This remark also applies to *any* kind of support completely covering the surface of the body, even though it be porous, and permeable to smoke. My jackets are removed every night for the purpose of massage of the debilitated muscles, washing, and the frequent application of electricity. In the practice of others, jackets are only removed every three, six or twelve months. The not removing frequently the jacket is a serious impediment to the physiological integrity of muscles, as also to the healthful action of the skin. Patients may have the skin so sensitive that even a draught of air affects them, on removal of the jacket. As regards manipulation, muscles should be kept at the highest state of physical activity, even in Potts' disease. [This is in contradiction to the practice of others, who lock up healthy as well as diseased articulations simultaneously.] The support should be removed once or twice every twenty-four hours and the muscles thoroughly manipulated. Unfortunately, experienced rubbers are expensive, consequently impossible in hospital practice; the patient thus feels more strength developed when the appliance is taken off than if manipulation had not been practiced. In our practice we do not produce *anchylosis*, but restore the functions and mobility of joints, the same as in perfect health.

[A child came in with a spinal angle.] This child should have got well long ago, as there is no active disease there; it should have had proper appliances; [it had on a plaster jacket, pressing on and excoriating the skin on the lungs;] massage, and electricity (faradism). The error is often made of keeping on jackets two or three years after the presumed cure.

Abscess in and around joints.—If a bone abscess, introduce a drill, then a drainage tube. If in the soft parts, make a good incision; after the pus is evacuated, scoop out the cavity with a scalpel; these steps are undertaken under antiseptic precautions. Pain is incident to internal pressure; giving opiates is bad practice.

On applying elastic tension splints, these cases can often be thoroughly cured in a year, or fourteen months; from two to five years would be required in using rigid extension.

It is complained that under the medical practice act of California juries will not convict even the lowest scoundrel.

Correspondence.

VIENNA, Feb. 28, 1884.

Editor of the LANCET—

Sir: No department of medical study here has a better or broader reputation probably than that of skin diseases, and the numerous lectures, both public and private, are always well attended by foreigners. The two university chairs in this branch are filled by Profs. Neumann and Kaposi, the former giving attention to syphilis principally. Prof. Kaposi is the successor of von Hebra, and his clinic on that account has perhaps a little wider reputation among foreigners, although Prof. Neumann is very well known to Americans through his book, edited by Dr. Bulkley. Numerous private courses are given by assistants, and young Dr. von Hebra, although he did not get his father's place in the university in competition with his brother-in-law, Kaposi, is now professor of cutaneous diseases in the Polyclinic, and gives excellent lectures.

The walls of Prof. Kaposi's lecture-room are filled with casts and paintings of rare cases. Four paintings, representing extraordinary growth of hair over the face, were presented by the emperor. In the centre of the room is a revolving chair, or dais, about four feet from the floor, on which the patients must mount before the class. The clinic lasts two hours daily, five times a week. It is held in the wards, and each patient, as soon as he is called, mounts a similar dais, being entirely innocent of clothing, and is either discharged, or further treatment directed. An immense number of cases are seen on "ward days," but the remarks are briefer, while the reverse holds true in the regular lecture-room. There a great many out-patients are brought in, and often much of the time is given to a few cases, or groups. The male patients are invariably stripped of clothing, the female not, except in rare cases, though in Prof. Neumann's ward it is the rule. It facilitates the study of skin diseases both in respect to time and thoroughness of diagnosis, but I fear would be hardly practicable with us. In fact, an American who should at home treat patients as they are treated here, would commit professional suicide. The lectures are amply illustrated by lithographic plates, etc., the foundation of the present magnificent collection being laid by von Hebra. Lupus is exceedingly common, and the treatment does not seem any more satisfactory than with us. The meth-

ods usually adopted are scraping and applying caustics, as chloride of zinc, or nitrate of silver. The results hardly seem to warrant such extremely painful treatment.

For syphilis, the hypodermic injection of bichloride of mercury is the prevailing method.

For severe burns, Prof. Kaposi uses a system of continuous warm baths kept at a uniform temperature. For a burn of the arm or leg only, a metallic trough is used, in which the whole portion affected is laid. A thermometer kept in the water continually warns the nurse of its cooling. For burns of the body, a special room or ward has been provided, which reminds one of a laundry in active operation. A series of immense tubs are provided, and above them a miniature derrick supporting a swinging frame, on which the patient is laid and then lowered by crank and chain into the water. Over the tub blankets are thrown, leaving the face alone exposed. Patients are under the constant supervision of a nurse who inspects the thermometers frequently and keeps the temperature at about 85° or 90° F. They are left in these tubs for long periods—weeks, and it is said, even a month or two. The theory is that the continued warmth equalizes circulation perfectly, and prevents internal complications, as nephritis, etc.

The results are said to be good, but no statistics can be easily obtained, for in this, as in other departments, they guard their statistics so jealously as to arouse suspicion.

A case burned on both arms and having only the arm tubs, was put into the general bath immediately on developing tetanus, but the fatal result was not averted. It would seem that this general continued immersion must be very exhausting, and one glance at the macerated patients indicates that such is the case.

Pallid faces, sunken eyes, and clammy perspiration do not always accompany burns with us, but I did not see a patient in the room who did not indicate almost as much exhaustion as one sees in the later stages of pneumonia. We were invited to the autopsy on the tetanus case, and one point in the operation may be of interest, as I think it is a novelty outside of Germany. I refer to the method of removing the spinal cord. The chest organs having been examined, while Prof. Kundrat was inspecting the intestines an assistant removed all the organs from the thorax including the larynx. Then there was brought into requisition two long chisels,

curved on the flat, and having in the blade a notch, its point being toward the handle—resembling somewhat a forked stick. One of the points was dull, the other with the edge leading to it, sharp. The dull point was then introduced into the spinal canal in the lower dorsal region, the sharp one then being outside, and with a mallet the chisel was driven upward, cutting through the laminæ of the vertebræ until the skull was reached. The same being done with the other chisel on the other side, the bodies of the vertebræ were removed in one piece, and the cord lay exposed just as the patient lay in bed—with the anterior portion of the cord upward. Considerable force is necessary to drive the chisels through, but the cord is not injured, and can be easily removed after its examination in situ. In this particular case hypostatic pneumonia was found, but unfortunately no macroscopical lesion of the cord.

DR. A. W. HURD.

A Question in Ethics and One of Development.

The following note was sent by a correspondent of Ontario, O.

Editor Lancet:

A fellow came to me week before last with a chancre on his penis. I cauterized it. He disappeared. In about a week he came back complaining that a surgeon in Mansfield had *burned* him *all over* and nearly killed him and wanted my opinion as to the treatment, etc. Ha! ha! ha!

I told him I had no opinion for *him*, and that I was under no professional obligations to *him*, and that he had better get cured where he got burned. He made some disparaging remarks about *Hades*, using the old version language, and then left, a wiser if not a better man.

We have a medical brother who is trying to raise *carp* in a cistern for family use. When they get to walking dry shod along the streets with boots on, I will notify you of the development and you can let the world know how to do it. First, lake; second, river; third, pond; forth, cistern with a small roof; fifth, tub, and final step, a boy upsets the tub and the carp takes to the dry land, and like Paddy's pigs, "set up for themselves."

DEVELOPMENT.

Proceedings of Societies.

The Detroit Academy of Medicine.

JANUARY 27, 1885.

The Academy met at the office of Dr. Sprague; the vice-president, Dr. Clark, occupying the chair.

WRITTEN COMMUNICATIONS.

Dr. Thompson read a paper on Duchenne's Paralysis (pseudo-hypertrophic muscular paralysis), of which disease he had seen a number of cases. See *LANCET*, March, 1885, page 393.

DISCUSSION.

Dr. Yemans: I have seen one case of this kind in this city; it was under the care of Dr. Munson, before he went to Pontiac. I do not know the subsequent history of the case.

Dr. Wyman: The doctor's paper suggests a comparison of the affection he has described with the progressive paralysis accompanied by muscular atrophy. In the former it appears that the nerve lesions are secondary, affecting first the extremities of the nerves; in the latter the lesions are primary and central.

Dr. Chittick: I once saw a case of pseudo hypertrophic paralysis at the clinic of St. Mary's Hospital. It may have been the same case spoken of by Dr. Yemans.

Dr. Yemans: It is surprising how small a central lesion may give rise to complete paralysis. This was illustrated in a fatal case of the disease that some members of the Academy will remember, in which the post mortem examination revealed the presence of a lesion in the cervical region, involving a portion of the cord not more than an inch in length.

VERBAL COMMUNICATIONS.

Dr. Wyman spoke of a case which he had seen recently with Dr. Connor, which seemed to him a remarkable one. The patient was a young woman, who as a child had had scarlet fever. From this she apparently recovered, but four years ago began to complain of pain in the supra-orbital region. She was said to have had following this an attack of cerebro spinal meningitis, and was under treatment some months. When she recovered she was blind. The peculiar feature in the case is the absence of anything in the patient's appearance or manner to indicate that her sight is not as good as ever. The iris still reacts to light, and, although the patient says she

cannot see at all, she moves about the house, and does her share of the work of the household apparently just as well as though her vision were perfect.

Dr. Connor: This patient was living at Ypsilanti at the time her eye trouble came on, and she was treated at Ann Arbor at that time for phlyctenular corneitis. After this followed the illness which was supposed to be cerebro spinal meningitis. The iris does respond to the stimulus of light, although it is ordinarily abnormally dilated. Ophthalmoscopic examination showed white atrophy of the optic nerve. There is one singular feature in the case. Every other day, she says, she perceives a diffused light, while in the intervening time she is totally blind. When I saw her she had been out in the kitchen making bread. She came into the room and spoke to Dr. Wyman, and then was introduced to me, and one would not have suspected that she was blind. Except for a slight divergent squint, her eyes appeared perfectly natural. She takes care of the house, makes the beds, etc. My own thought was that there must be some fibres of the nerve that are not involved, and that by the aid of these she has, at times, some perception. The intermittent perception of light is an interesting phenomenon. It seems as though the small amount of nerve tissue which preserves in a measure its function becomes quickly exhausted. I have seen one other case that in some particulars resembles this one, although entirely different in pathology. In this case there was obliteration of the retinal artery, probably the result of an embolus. My prognosis was not favorable, and this has been the verdict of most of the oculists who have examined him, although I am told that one of them says he thinks he can benefit him.

Dr. Yemans: I have observed during the extreme cold weather of the past ten days, there has been an increased number of cases of eczema, affecting the hands, face and body. With the advent of milder weather these cases improve.

Dr. Clark: I have had recently a number of cases of osteitis affecting the long bones, in two cases the tibia, in a third the bones of the arm. I have seen but two cases previous to these in all the years of my practice. Is it merely by coincidence that these have come to my notice all at once, or is there some special cause that has been in operation with exceptional force of late? The question is one I am unable to answer.

Dr. Yemans: I have known also of two similar cases.

Dr. Wyman: In regard to the operation for extroversion of the bladder, made on a child five days old, which I reported to the Academy a few weeks ago, I wish to say that I got excellent union. Notwithstanding the considerable loss of blood, the child rallied well after the operation, which was completely successful. Unfortunately, however, I have since been obliged to write a death certificate for my little patient, who died of infantile convulsions. At the time of death there was but little scar remaining, and I had every reason to feel satisfied with the result of the operation.

Adjourned.

February 3, 1885.

The Academy met at the office of Dr. Cleland.

In absence of the president and vice-president, Dr. Cleland was called to the chair.

PATHOLOGICAL SPECIMENS.

Dr. Wyman exhibited, as a pathological specimen, a portion of a carcinomatous penis recently removed. The patient was a colored man, 74 years old. Last October he was subjected to circumcision on account of an epithelioma upon the prepuce, but the disease returned, and was making rapid progress. I accordingly amputated the extremity of the organ.

I had experienced in a previous operation of this kind a great deal of trouble from contraction of the urethra. In this case, to guard against this difficulty, I drew out the urethra, split it into three parts, and stitched these to the external integument.

In connection with this case I am reminded of another of a different character, which was of some interest. The patient had cystic degeneration of the testicles. In connection with this difficulty, he developed well-marked hysterical symptoms. He had chills, and flashes of heat, and suffered from apprehension of some evil, so as to be wholly incapacitated from business. The man was about 62 years old; had been an officer in the army, and held a good social position. Had been an active business man previous to this attack. One of the testicles was enlarged, and the patient referred his symptoms to this cause. I accordingly removed the testicle, and the hysterical symptoms disappeared. Subsequently the other testicle became en-

larged, and the same hysterical phenomena were again manifested. Removal of the testicle again removed the hysteria.

Dr. Manton exhibited under the microscope a specimen of gonococcus, the peculiar bacteria found in gonorrhœal pus. The specimen was put up by Dr. Abbott, of Baltimore, and obtained by him no doubt from Prof. Sternberg, of Johns Hopkins university. This micro-organism is of especial interest from its presumed etiological relations with ophthalmia neonatorum. Cr  d   maintains that this disease may be prevented by treating the eyes with a two-per-cent. solution of silver nitrate. To determine whether the disease might not be produced by non-specific irritants, Zweifel made experiments on six healthy, new born children, into whose eyes he introduced the lochial discharge from six different women, none of them affected with gonorrh  a. In only one case was there any inflammation of the eyes produced, and this was said to be of a diphtheritic character, quite unlike the true ophthalmia neonatorum.

Several attempts have been made in Germany to cultivate this bacteria as a pure culture, but thus far without success.

Dr. Farnum: These micrococci are said to have a life history, running through four or five weeks, at the end of which time they disappear. Hence, it is claimed that the so-called abortive treatment of gonorrh  a is useless. At least if it succeeds, it is by establishing an ordinary urethritis.

WRITTEN COMMUNICATIONS.

Dr. Yemans read a paper on "Diseases of Nails," particularly on that affection commonly described as the ingrowing toe-nail.

Dr. Wyman: The treatment of this affection in the hands of many practitioners is unsatisfactory; many different plans are adopted. My father's plan of dealing with these cases was to take a strip of diachylon plaster and apply it to the toe, binding it to the adjacent toe in such a way as to remove the pressure from the tender point. This mode of treatment seems to be in accordance with the pathology, as it has just been described, and it was attended with success.

Dr. Maire: I have been in the habit myself of employing adhesive plaster in the treatment of in-growing toe-nail, although not precisely in the way described by Dr. Wyman. I apply it only to the toe affected, aiming to prevent the nail from causing further irrita-

tion, and at the same time, by applying firm pressure, to cause anæmia of the member. The patient should have a pair of shoes made in such a way as to prevent pressure from falling on the toe. The sole should have a hollow to receive it. Carrying out this plan of treatment, I find my patients speedily recover.

Dr. Andrews: No doubt the method of treatment by operation, described by Dr. Yemans, is effectual, but there are many patients who object to a bloody operation. I find that these cases can be satisfactorily treated without an operation, and a permanent cure effected in a few weeks.

The inflamed toe is to be treated at first with hot water, and when unhealthy granulations are present, with hot fomentations, then astringents—per sulphate of iron, or tincture of iron and quinine.

The toe is then to be submitted to a uniform firm compression to diminish the hyperæmia. To this end a small roller bandage is to be applied so as to cover the toe completely and produce moderate pressure. A little roll of lint is introduced between the nail and the inflamed tissues. The bandage should be renewed at first every day, after a little every other day. The treatment I have found completely successful even in cases of long standing, a cure being effected in a few weeks' time.

The method described in the paper is no doubt the most prompt, and it is wholly rational. It probably costs the patient less, but it requires him to submit to a surgical operation, from the thought of which many patients instinctively shrink.

Dr. Bradley: From what I have heard tonight I am led to conclude that for the treatment of this affection each physician has his own method. I agree with Dr. Yemans in his statement of the pathology of the affection. I have seen no cases in which the nail is wider than that of the corresponding toe of the other foot. While I would not hesitate to make such an operation as has been recommended, I find that many patients object.

My plan is somewhat different from any that has yet been mentioned here. I first remove the fungous granulations by applying a solution of potassium permanganate, fifteen to twenty grains to the fluid ounce. This is not a very painful procedure. I then apply a suitable bandage, inserting a pledget of lint, and in a few days I have my patient able to

walk. The cure is permanent, provided the patient will wear a wide shoe.

Dr. Cleland: We had a good deal of trouble with in-growing toe-nails in the army, particularly before the regulation shoe was adopted. Our practice was to remove the granulations, together with a portion of the nail. Results satisfactory.

Dr. Connor: Why is it that physicians pay so little attention to the treatment of diseased nails?

Dr. Cleland: They leave this largely to manicures.

Dr. Wyman: The people do not like to pay physicians for treating such trifling difficulties.

Dr. Connor: One thing I am more and more convinced of, and that is that the regular physician does not pay enough attention to rendering his treatment agreeable to the patient. I know a great many persons who employ homœopathic physicians for no other reason than that they do not have to take the bitter and nauseous medicines the "regulars" prescribe. In fact many homœopaths use the same remedies, but they are careful to cover the dose under the disguise of a sugar pellet.

VERBAL COMMUNICATIONS.

Dr. Manton: I saw an instructive case a few days ago. It was that of a woman who had been recently confined. Her physician thought that the lochial discharge ought to be checked, and he gave her a solution to be applied locally for this purpose. It checked the flow, but it produced extensive erosions of the surfaces with which it came in contact. It was in fact a saturated solution of nitrate of silver—many crystals of the salt even remaining in the bottle undissolved. This seemed to me to be heroic treatment.

Dr. Wyman: I have seen sympathetic irritation of the bladder produced by injections into the vagina of ten-grain solutions of caustic.

Dr. Sprague: I have seen a similar result follow the use even of a preparation of hamamelis.

Dr. Connor exhibited a climatic map of the United States prepared by Dr. Denison, of Colorado, showing the distribution of rain, the course of isothermal lines, and various other data collected during the past few years by the observations of the U. S. Signal Service corps.

Adjourned.

FEBRUARY 10, 1885.

The Academy met at the residence of Dr. Jenks.

The president called the vice-president to the chair, took the floor, and stated that circumstances compelled him to remove from the city, and, therefore, he wished to tender his resignation as president of the society. He regretted that he was obliged to do this, as his connection with the society had been one of the pleasantest he had ever experienced during his medical career. He did not wish to completely sever his connection with the society, but wished to remain an honorary member.

Dr. Jenks exhibited an apparatus for holding a patient in an exaggerated lithotomy position, when being operated on for uterine or perineal diseases. He also showed a full set of Simons' specula. These specula he prefers to Sims', as he can operate to better advantage on very fleshy persons. If these fleshy women have their hips and shoulders elevated, and the legs thrown over the body as much as possible, the cervix uteri will be brought into the axis of the outlet and the anterior wall of the vagina directly in front.

Dr. Connor reported a case illustrating a class of neurasthenic cases that sometimes give general practitioners, as well as specialists, a great deal of trouble. The patient was a lady of good social standing, and who had been well trained in her youth. This patient had all the symptoms of general neurasthenia. When he examined her eyes he found a condition of compound astigmatism, which, when corrected with proper glasses, cured her to a very great extent. She awoke one day and found a sensitive spot on or near the top of her head. It was about $1\frac{1}{2}$ or 2 inches in diameter. This spot, when touched, would cause her to faint. On again examining the eyes he found that they had altered, and he corrected her glasses. From that out she has had no more of those untoward symptoms that her husband and family physician feared would drive her insane. The doctor had other cases similar to this one, and all seemed relieved when patients were properly fitted with glasses.

Dr. Jenks reported a case of pruritus vulvæ of extreme severity, which he saw in consultation. He recommended a five-per-cent. solution of muriate of cocaine to be applied. The result was complete relief.

Dr. Clark had used a solution of two-per-cent. of the drug on a case of this kind, but

without much good result. He afterwards used a solution of corrosive sublimate, with much better results.

Dr. Noyes: When in general practice I used to use oil of cade, but not the stuff that is commonly sold under that name, but the pure imported article, which I saw used in Hebra's clinic.

Dr. Long: I have had under treatment for some time, at the marine hospital, a man affected with general eczema. I tried every drug I could think or hear of, without benefiting him in the least. I finally controlled the disease with internal doses of one-half grain of chrysophanic acid twice a day; the patient, under this treatment, made a good recovery in ten days, and is now entirely well. A New York physician recently reported thirty-two cases treated in this manner, with only two failures.

Dr. Clark said he never found a better remedy than chrysophanic acid, used externally, for psoriasis, syphilides and scaly diseases of the skin; he used an ointment containing ten grains to the ounce.

Dr. Yemans uses it in psoriasis, but finds that the cure is not permanent. He often finds patients with eczema that have been treated with arsenic. This drug always aggravates the trouble, and should not be used.

Dr. Connor mentioned the case of an old gentleman afflicted with chronic granular lids, panophthalmitis, etc. The eye was so much trouble to him that he insisted on having it out. Dr. Connor recommended a solution of muriate of cocaine to be applied, and the physician who has charge of the patient reports relief from all pain and most of the trouble.

Adjourned,

W. R. CHITTICK, M. D.,

Sec'y *pro tem.*

FEBRUARY 24, 1885.

The Academy met at the office of Dr. Yemans. In absence of the president and vice-president, Dr. Bradley was called to the chair.

Dr. Kelly read an inaugural paper on the Knee Joint.

Dr. Kinney read a paper giving an account of two cases of menorrhagia caused by a sudden powerful emotion.

DISCUSSION.

Dr. Manton: I have seen quite a number of cases of menorrhagia, brought on by ner-

vous impressions. The true cause of hemorrhage is not unfrequently overlooked. One of the worst cases I ever saw was due to a lacerated cervix, with sub-involution, and was cured by an operation. I have seen several cases where the hemorrhage was caused by fibroid tumors, so small that they might easily escape observation. In such a case a nervous or emotional impression might be the immediate occasion of the trouble, and yet not be in reality its cause.

Dr. Wyman: I recall a case illustrating the influence of mental impressions over uterine hemorrhage. The patient had aborted when about six weeks advanced in pregnancy. Menstruation came on about six weeks afterwards, in the form of a severe hemorrhage, which was not controlled until I injected perchloride of iron. Even this produced only a temporary effect, and I was obliged to repeat the injection in a day or two. Hemorrhage, however, recurred again and again, and finally it became necessary to repeat the injections of iron several times a day. I found after a while that when I made preparations to make an injection, the uterus contracted, and hemorrhage ceased, and it was not necessary to inject the iron at all. I repeatedly stopped the hemorrhage in this way, and finally resorted to the use simply of ice in the vagina.

Dr. Connor: The paper opens up a subject which is a very broad and important one, viz: the relation of cerebrum to vascular derangements. Among the common illustrations of these relations under normal conditions, we may mention the phenomena of blushing, of "watering" of the mouth at the sight or suggestion of appetizing food, involuntary passage of urine and of the fæces under the influence of fright or other emotion, etc. A remarkable instance of an irregular phenomenon of this general character, is the story that has recently been told of a chambermaid caught in the act of sexual congress with the coachman, whose sphincter vagina took such a firm spasmodic grip on the imprisoned male member that the medical man, whose assistance was sought, found it necessary to give her chloroform to relax the spasm.

Dr. Maire: When other remedies have failed to control uterine hemorrhage, I have found electricity to serve a good purpose.

Dr. Noyes: When I was in Vienna, I attended a medical meeting where one of the physicians related a case similar to the one alluded to by Dr. Connor. In that case, however, the sexual intercourse was not illicit,

and the spasm was not caused by the shame or agitation resulting from detection.

We can all recall instances in which mental conditions, fear, want of confidence, etc., have influenced the course of a disease. I had not been long in practice before I became convinced that if a patient became despondent and lost confidence in me, it was my duty, either to call counsel or to give up the case.

The influence of anxiety and worry in producing and aggravating morbid conditions is well known. Eye troubles are not unfrequently caused in this way. I was consulted once by Gov. Crapo in regard to a difficulty of this kind. He had at first noticed something apparently passing before his eyes—he tried to brush it away, supposing it to be his hair, but the trouble increased so that soon he became almost blind. By suspending business, under my advice, he soon recovered his sight.

EXHIBITION OF INSTRUMENTS.

Dr. Lyons exhibited a new form of urinometer which can be readily carried in the pocket without danger of breaking. It consists of six specific gravity beads arranged in order in a tube, the heaviest at the bottom, the tube having an opening at the bottom for the admission of the urine but not large enough to allow the beads to escape. The beads, as usual, correspond respectively with specific gravities of 1.030, 1.025, 1.020, 1.015, 1.010, and 1.005. To use the instrument, plunge the tube into the urine to be tested and observe how many of the beads float. If none should float, the specific gravity is below 1.005; if only one float, it is between 1.005 and 1.010, and so on. A very small quantity of urine, contained in a test-tube suffices with this instrument for ascertaining the specific gravity.

If the beads are correct, and due attention is paid to temperature, the exact specific gravity may be ascertained, by adding to a given volume of the urine, drop by drop, pure water until one more bead is made to sink. A simple mathematical calculation will give the exact figures. Suppose, for example, three of the beads float in the specimen of urine, the temperature being 60° Fahr. It is found that to cause one of the beads to sink there must be added to 1,000 minims of the urine 250 minims of water. This brings the specific gravity therefore to 1.014 (*i. e.*, just below 1.015). Then $1000 : 250 :: 14 : x$, 14 being the last two figures of the specific gravity of the diluted urine, and x the figure

to be added to this. Solving the proportion, we find that $x=3.5$ and $3.5 + 14.=17.5$, the last two figures of the true specific gravity, 1.0175.

One more example. Five of the beads float in the undiluted urine. It is necessary to add to 1000 minims of the urine 75 minims of water to cause one of them to sink, reducing the specific gravity thus to 1.024. Then $1000 : 75 :: 24 : x$, and $x=1.18$, which added to 24 makes 25.8, on the scale of the ordinary urinometer, corresponding with a specific gravity of 1.0258.

PREVAILING DISEASES.

Dr. Maire : I have seen of late much bronchitis among children and some cases of bronchial pneumonia, attended generally with very severe cough.

VERBAL COMMUNICATIONS.

Dr. Wyman: I would like to say a word about the treatment of hydrocele. I have been in the habit of treating it by incision.

Dr. Thorn, of Toledo, O., writes: "Not for twenty years have I temporized with hydrocele. The knife has been my refuge, and always successful." I have lately seen a case that had been treated by injection which was followed by suppuration, rendering necessary incision.

Dr. Noyes: I have seen many methods used for the treatment of hydrocele, and have myself used injections, but I have always been afraid of using strong injections. I have seen dangerous inflammations resulting especially when the fluid has been allowed to remain. The operation of incision is not new. I saw Dr. Pancoast operate thirty years ago, removing a portion of the tunica vaginalis. Setons have been used also with good effect. I have cured hydrocele by scarifying the tunica vaginalis at the time of puncturing the tumor.

Adjourned.

A. B. LYONS, M. D.,
Secretary.

J. E. CLARK,
President.

MARCH 31, 1885.

The Academy met at the office of Dr. Yemans, the vice-president occupying the chair.

EXHIBITION OF PATHOLOGICAL SPECIMENS, ETC.

Dr. Connor: I have here a new salt of co-

caine which has interested me very much, and which I take especial pleasure in exhibiting as something originating in our own city. It is a compound of hydrobromic acid with the alkaloid. It is in distinct, pure white, translucent crystals, which are permanent in the air, and readily soluble in water. The solution (four per cent.) is perfectly colorless, and neutral in reaction. I have used it in a few cases, and I find that it not only produces the characteristic effect of cocaine, but that it is more prompt even in its action than the muriate, and at least equally powerful. I should judge that its effects were produced in about two-thirds the time required where a solution of the muriate is used. It produces no irritation. I have found that the oleate of cocaine is irritating to delicate mucous membranes. The solution contains necessarily some excess of oleic acid, and generally produces so much irritation that patients complain of it. The anæsthetic effects, moreover, of the oleate are disproportionately small. I have used the citrate and the salicylate (four-per-cent. solutions) finding them practically identical with the muriate. Dr. Lyons can perhaps tell us more about the hydrobromate.

Dr. Lyons: The idea of combining cocaine with hydrobromic acid suggested itself in view of the alleged sedative action of the bromides of other bases, organic as well as inorganic. At the same time I had in mind the possibility of producing a salt more easily crystallized than the muriate. In this I succeeded beyond my expectations. The hydrobromate has a strong tendency to assume the crystalline form. The advantages of this are apparent at once. It enables one to produce, even from impure materials, a pure salt, and the crystalline form of the product is a safeguard against adulterations. I have obtained the crystals in two forms—the bold translucent prisms, such as Dr. Connor has showed you, and fine needles resembling those of morphine sulphate. When the quantity of material operated upon is small, it is easier to obtain it in these minute crystals which are equally pure with the large ones. There is another advantage belonging to a crystallizable salt. Its solutions pass through an animal membrane by osmosis more readily than those of an amorphous salt. In other words, they are more dialyzable. I believe it is on this account that the hydrobromate exerts so prompt an effect, as Dr. Connor states that it does. The proportion of alkaloid contained in this salt is somewhat less than that in the hydro-

chlorate, or muriate, as it is still generally called. The "muriate" contains $89\frac{1}{4}$ per cent. cocaine, the hydrobromate (anhydrous) 79 per cent., the citrate (neutral) $81\frac{1}{4}$ per cent., the salicylate $69\frac{1}{3}$ per cent. Much of the muriate of cocaine that is sold is impure; crystallization appears to be the only way of getting rid of impurities which accompany the alkaloid in the process of manufacture. The hydrobromate readily frees itself from these impurities and in this respect has an advantage over the other salts of cocaine.

Proceedings of the Wayne County Medical Society.

DETROIT, March 19, 1885.

The Society convened this evening in regular session and Dr. C. C. Yemans read a paper on Hypertrophy of the Prostate (See page 491 of this issue), in which he reported a case in which, after lithotomy by the lateral operation, the patient being troubled with hypertrophy of the prostate, section of the levator prostatae muscle was made without relief.

Dr. Leonard remarked that, while he was not specially posted upon the anatomy of the male perineum, yet if the levator ani muscle of the male was closely similar to the tri-form muscle of the female, which is the analogue of the male muscle, he did not see how tenotomy of any portion of it was to relieve an enlarged prostate. The paper, however, was more interesting to him in its comparative anatomy, for he had recently been engaged in looking up the comparative anatomy, and the development of the female sexual organs, and was surprised to hear such a similar history of development in the organ anciently known as the "male uterus." In embryonic life of either man or animal, it is the hyper-development of one of two tubes, which are equally present in both sexes of either man or animal, which determines whether the product of conception will be a male or female. These tubes are the Müllerian and Wolffian ducts. If it be the Müllerian duct that is hyper-developed, then the resulting progeny is a female; if it is the Wolffian duct that receives the most nourishment, or is the better developed, then the result is a male. Just what determines which of these companion ducts will be the one to be prominently developed, at the expense of the other, is not now determined. But the one that receives development remains pervious, whilst the

other becomes atrophied, so much so as to be almost invisible, without a very careful dissection. Another point is that this atrophied duct is prone to give the possessor trouble by its cystic degeneration. This is common in man or animals. A scientist, Mr. J. Bland Sutton, who has paid careful and scientific attention to this subject, states that animals, females, are subject to ovarian tumors, as well as the human female. He states that fully two-thirds of the ovaries of mares that he has examined have been the seat of cystic degeneration, and what is more, these cysts do not have their origin, as is commonly supposed, in a degeneration of the ovarian stroma, but are the cystic degeneration of the atrophied Wolffian ducts. It is also my opinion, from the study that I have put upon the growth of many so-called cystic tumors of the human ovary, that they are really Wolffian, rather than Müllerian in their origin. The remnant of the Wolffian duct is seen in the human female as the parovarium; and in nearly two-thirds of the cases you will find this atrophied Wolffian organ undergoing cystic degeneration. My theory is that these clear cysts of the ovary are simply enormous cysts of the parovarium, resulting, finally, in the destruction of the ovarian stroma through pressure, and other causes. These blind tubes, or non-developed ducts, are very prone to cystic degeneration in all the lower orders as well. The common barn-yard fowl has been frequently diseased in this manner, so too the common frog. Another peculiar point regarding our common barn-yard friends, is that only *one* of the Müllerian ducts is developed, and this one is *always* the *left* one; the right one becomes equally atrophied with its opposite sex one, the Wolffian. Another point that carries out the assertion that these non-developed ducts are prone to cystic development, is the fact that the non-developed *right* Müllerian duct of the barn-yard fowl is generally found undergoing cystic enlargement at its blind, or upper terminus. This condition of development is seen in all bird-life; though in their earlier stages of development, both Müllerian ducts are prominently developed. Another point, that is something of a side issue, however. We can explain the origin of double-yolked, and yolkless eggs, knowing this development of the oviduct of the hen. As it was once a source of great mystery to me, I take a moment to briefly state the physiological process. The left—and you will notice that it is not alone that human female is left-sided in her sexual

organs, in the matter of pain—oviduct, the hyper-developed Müllerian duct, is several inches in length, the upper portion is the receiving portion, or fimbriated extremity; the middle portion, the one that furnishes the albuminous coating of the entering yolk; and the lower portion that furnishes the hard covering. Now, if the middle portion, or a little above the middle portion, be constricted then the yolk will be retained in the tube; this excites as much secretion of the albuminous matter as if it passed fully down; but the yolk, from its oversize, does not become enveloped with the albumen, hence the albumen, in the lime-forming portion of the oviduct, is coated with the shell-forming material, and it is finally expelled as a yolkless egg. The yolk is finally regurgitated into the peritoneal cavity, and is reabsorbed. A double-yolked egg is formed by the first yolk being retained in the upper portion of the tube long enough for a second yolk to become its company; both then pass down, and, becoming enveloped with the albumen, and finally with the lime-salts, it is thrown off as a double-yolked egg. Occasionally two yolks might be thrown off at the same instant at the ovary; but a spasmodic stricture of the oviduct would produce the same thing, and is probably the frequenter method.

Dr. Clarke: Dr. Wyman's plan of treating bad cases of hypertrophy of the prostate as given at a previous meeting of the Society, seemed very practical and important, but after hearing this paper, the whole subject appears clothed in considerable doubt. It does not appear quite clear how the levator prostatae can rotate the prostate, or how the proposed operation can be of material service in giving the relief desired. With prostate irritation, there is congestion of the surrounding tissues, with more or less thickening which may constrict the urethra. The prostate being attached to the urethra, its retention might cause constriction.

Dr. Chapin: Was much pleased with the paper. Has treated quite a number of cases of hypertrophy of the prostate, but the results have been very unfavorable—possibly nine-tenths proved fatal. This disease usually comes on in advanced life; is a chronic inflammation, and may often be excited by colds. Surgeons in New York speak very unfavorably of the results in these cases.

Dr. Wm. Brodie: Probably seven-eighths of these cases arise from gonorrhœa. Horse-back riding is said to be a common cause. Colds, the use of certain kinds of foods and

drinks—liquors, wines, beer, etc.—may excite an attack.

In these cases there is spasmodic action which can usually be relieved by quinine and opium. The hands placed in cold water, or some diversion of the attention may give relief. It is important to heed the first call to urinate; the second may be ineffectual. Cases treated in this manner usually have but little trouble, and seldom die of this ailment.

Dr. Wyman's operation may give relief by cutting off the circulation. In many of these cases a sound gives better results than the catheter.

Dr. Dakin: It is a popular belief that bicycle riding is much more injurious than horse-back riding. Hypertrophy of the prostate was very unusual with these operations, though gonorrhœa is remarkably common.

Dr. Wyman: Was very much pleased with Dr. Brodie's method of treating hypertrophy of the prostate. There is always spasmodic action which should be relieved, if possible, by soothing treatment.

The operation which he recommends—section of the levator prostatae—is only for those cases which are not amenable to opiates and other soothing remedies, and is designed as a means of avoiding catheter fever, which so very frequently follows the use of the catheter in these cases. In bad cases it is dangerous to force an instrument into the bladder.

The urethra passes through the prostate. The prostate moves during micturition, especially if there be straining to empty the bladder, and an hypertrophied prostate will press with considerable force on the urethra.

The rotation of the prostate causing pressure on the urethra and the action of the levator prostatae muscle was illustrated by a catheter for the urethra, and a handkerchief for the prostate.

Dr. Leonard presented a speculum devised by Dr. Haywood Smith, of London, England. This speculum is a modification of Sim's, consisting of three pieces, two of which being united, constitute a Sim's speculum. These blades are of different lengths and sizes, so as to adapt them to various uses. These sections, or pieces, resemble a Sim's speculum cut transversely through the center, and thus occupy but little space. This speculum possesses a number of features

which commends it to the careful attention of gynæcologists.

Dr. Smith visited the society several months ago and accompanied the speculum with a note, expressing the pleasure he enjoyed while with the society, and the very favorable impression he formed of the profession in America.

Adjourned.

W. H. ROUSE, M. D., PH. C.,
Secretary.

Health in Michigan.

MARCH, 1885.

For the Month of March, 1885, compared with the preceding month, the reports indicate that remittent fever and rheumatism increased in prevalence.

Compared with the average for the month of March in the seven years, 1879-85, rheumatism and neuralgia were more prevalent, and intermittent fever, diphtheria, measles, scarlet fever, influenza, and pneumonia were less prevalent in March, 1885.

For the month of March, 1885, compared with the average for corresponding months for the seven years, 1879-85, the temperature was considerably lower, the relative humidity was more and the absolute humidity, and the day and the night ozone were less.

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of March, 1885, at 32 places, namely: Alamo, Armada, Armada tp., Ann Arbor, Belvidere tp., Boyne, Brown City, Butler tp., Calumet, Clay tp., Coral, Courtland tp., Detroit, East Saginaw, Evangeline, Grand Rapids, Hastings. Hope tp., Ishpeming, Ithaca, Kalamazoo, Mears, Montcalm tp., Oshtemo, Pentwater, Pontiac, Reese, Roxand tp., St. Johns, Tecumseh, Wingfield tp., and Wyandotte. Scarlet fever at Bloomingdale tp., Charlotte, Detroit, East Saginaw, Grand Rapids, Hudson, Ithaca, Kalamazoo, Kalamazoo tp., Leland, Ludington, Niles, Novi, Maple Rapids, Manistee, Muskegon, Oshtemo, Pine Run, Port Huron, Portland, Southfield tp., South Haven, white Oak tp.; twenty-four places. Measles at eleven places: Brown City, Detroit, East Saginaw, East Tawas, Grand Haven, Grand Rapids, Ishpeming, Kalamazoo, Port Huron, Stanton, Swartz Creek; and small-pox at Battle Creek, Bellevue, Cassopolis, East Saginaw and Grand Rapids.

HENRY B. BAKER,
Secretary.

LANSING, April 9, 1885.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Medical Societies as Educators.

The medical society has many and important uses to the medical profession, but to us its greatest work is its educating power over young men. Here, if the society be what it should be, the young graduate is courteously received and encouraged to speak on his feet, to write, and read that he has written, to bring in his cases, and describe them for the friendly criticism of his elders, who are, or should be, his post-graduate instructors.

If the graduate be what he should be in education, he will in turn be able to instruct his elders, in matters pertaining to microscopical investigations, chemical examination, the physiological action of drugs, very many other things, concerning which the busiest of practitioners have little time to keep posted. Hence, each may alternately take the part of teacher and scholar. To retain this two-fold function, is to remain young, and ever be a scientific physician. We know of no organization in which so great assistance can be obtained in the development of this dual character, as the properly constituted medical society.

A mistake is often made by physicians, in reference to the number of physicians that is needful to form a medical society. That is society is too large for the best training of each member in which each person cannot be heard from at each meeting. Five to fifteen makes the best society, if each individual means to do his share, and does do it. That society is constituted most happily when each member is constantly studying for objects and thoughts to present to the society.

It needs to be remembered that a society will not conduct itself. If all do not take a paternal interest in the work of the society, then some one must undertake the task of stimulating the others and so encouraging them as to bring out their best work with as little that is bad as possible.

The difficulties in the way of these organizations are many.

1. The mutual envies and jealousies of physicians prevent the possibility of bringing some persons together, though these may each be equally good fellows. We know of no way to overcome this obstacle, except to form separate organizations for each with the

doctors with whom these may work. Or in some cases it may be possible to so interest each individual in that which they have in common, that they may forget their repulsions, and unite on that which they have in common.

2. The uncertain and irregular calls upon the physician's time render it difficult for him to make sure of any particular hour. The only remedy for this is special care on the part of each to arrange all known cases so that he can be spared for the hours devoted to mutual improvement. By such foresight prompt and regular attendance is quite as possible as at breakfast.

3. The indifference of imperfectly educated men, to the proficiency of themselves or others, is indeed the greatest obstacle to meet. In many cases we admit it seems utterly insurmountable. But in others, by the use of means especially adapted to the particular individual it is desired to arouse, he can often be awakened.

That physician who in his town or his county, sets to work to overcome these and other obstacles to the working of medical societies deserves the highest praise as a lover of his profession. We are personally familiar with many such doctors. One in particular, in a town of some three thousand persons, has for years acted as secretary, gets the doctors together, persuades some one to write a paper, often has one himself, plans such a discussion as will interest the doctors of his region, calls forth their powers of speech by judicious questions; in a word, oils the machinery so that all learn something at each meeting, and contribute something for the good of others. Then he writes up the minutes of the meeting far better than each member could do it. These minutes, with the paper accompanying them, go to some medical journal to interest and profit a wider audience. One or more such men in a town makes it certain that there will be a good medical society.

The Sins of Medical Charity.

Perhaps no one topic calls for more frequent journalistic comment than the sins of medical charity. All physicians believe in medical charity. It is the part of every doctor to do his share of service to the sick poor. To their honor be it said that it is rare that an honorable physician refuses to respond to calls from the sick poor. So fully and so strongly is this principle engrafted in the mind and heart of the profession that if every free dis-

pensary and hospital in the world were blotted out, the sick poor would be cared for at once and we suspect they would on the whole be better cared for. It is a libel upon the medical profession to assert that the state or the city is compelled to hire doctors, and start a free dispensary in order to have the poor receive medical attendance. The existence of these poor is indeed needful to furnish to the recent graduate clinical material for study, and for the exercise for his newly-gained powers.

The first sin of medical charity as it practically exists to-day is that it does not stop with rendering aid to the sick poor, but it helps those abundantly able to help themselves. Here the sin is two-fold; it takes the patients really poor from the young doctor, who would be delighted to get such patients and who would labor over them with the greatest care, and it takes other patients abundantly able to pay any doctor for the service rendered.

Thus these charities cripple the professional development of the younger portion of the medical profession and diminish the aggregate income of the whole profession. It does more; it wrongs the people in that it introduces a fallacious element into their lives; they think they can get something for nothing. Thus they become pauperized. So all the parties interested are sinned against.

We were led to this line of thought by some facts that have come to our notice respecting the public dispensaries of Detroit. For those connected with the several medical colleges there is the excuse that these sins, which all admit exist, are neutralized by the use that is made of this clinical material, in teaching medical students. Of this we shall not now speak. But this answer cannot be made to the same charge brought against the city dispensary. We have taken some pains to get at the facts in the case. And these facts are worth the consideration of every lover of the medical profession, and advocate of manliness in men and womanliness in women.

In so far as we have been able to learn, all that apply for free medical relief are placed under the care of the city physicians. Hence, among those who regularly receive city medical aid are families owning one or more houses, having large bank deposits, etc. Some of them would doubtless find it difficult to pay a physician at each visit, but very many could pay within a few months, not to say weeks. As a result the amount of work pressing upon the city physicians is enormous,

and constantly increasing. All of this material could and would gladly be cared for by the younger doctors of the city of Detroit. From it all several physicians could obtain a good living. Besides, as the work is now done, the city physicians are so over-worked that they cannot make their experience of any avail in a scientific way. But if the same work were divided up among a dozen or two of young doctors, we would be certain to get some professional development.

The evils connected with the system are constantly increasing. What can be done to stay them?

1. Every case should be fully investigated before a city physician is sent to it, and none but the absolute needy should be thus supplied. This, we understand, was the intent of those making the present law. But from one cause or another, this intent has been entirely subverted, and the city physician is sent to all who apply, with little or no investigation. If there be any investigation as to the needs of those applying, it is utterly incompetent to sift the needy from the others, who choose to take this mode of saving a penny. The exercise of this supervision is extremely difficult, and at best is but a makeshift.

2. The real remedy lies in at once abolishing all city physicians. If it were needful the names of dozens of excellent physicians could be obtained who would gladly attend to all the cases of the poor so-called and take their chances of getting such compensation as lay within the power of the sick. Each would be fully investigated, and the whole question disposed of to the advantage of the city treasury, the people at large, and the medical profession.

Let the Common Council of Detroit ask itself why it should vote several thousand dollars of the city money to sustain a service of city physicians, when the work would be done better, without the expenditure of one cent from the city treasury.

While we have given an instance as existing in Detroit, it is but a feeble one in its sins compared with those existing in other cities.

The Washington Meeting of the International Medical Congress.

A copy of the rules and preliminary organization of this body lies before us.

These rules admit to membership the delegates from medical societies, in about the

same proportion as the American Medical Association. Foreign delegates are required simply to register their names and pay the dues.

The work of the Congress is to be done in nineteen sections. General meetings will be held for the same purposes as the general meetings of the American Medical Association.

Each section, by its officers, will have presented to it certain questions by persons appointed for this purpose. Each one thus presenting a subject to the section will in advance submit the propositions he expects to prove.

All notices of papers to be read before the sections must be sent to the secretary of the section to which they belong, before April 30, 1887. These abstracts will not be published till after the meeting of the Congress.

No paper will be received that has been read before another society or previously published.

The official languages are English, French and German. Those who introduce debates will be limited to twenty minutes, and those who speak on any question will be limited to ten minutes.

In looking over the list of officers of the Congress, we noted several interesting points.

1. Of the 315 officers of this Congress, 55 are from New York City, and 13 from the rest of New York State. Thus, one-sixth of all the men in the Congress come from one city. Brooklyn, with a population about half as large as that of New York City, has only two representatives among the officers of the Congress. Next to New York City, Philadelphia has the largest number of men on the official list of this Congress. The number is 48, or about one-seventh of the entire number. The rest of the state of Pennsylvania has but two representatives. Next on the list is Boston, with 34 representatives. The whole of the rest of the state of Massachusetts contributes but two. Next is Chicago with 19 representatives, with but one from the rest of the state of Illinois. Washington has also 19 representatives, the same as Chicago. Cincinnati follows with 13 members. The rest of Ohio has only one representative. The United States Army has eight officers, and the United States Navy six. Canada is represented by six persons, all from Montreal. Charleston, S. C., has six members. Mobile, Ala., Nashville, Tenn., Richmond, Va., Albany, N. Y. and New Orleans, La., have each three representatives. Ann Arbor, Mich., Brooklyn, N.

Y., Syracuse, N. Y., Louisville, Ky., Augusta, Ga. and Rome, Ga., have each two places on the list of officers. Besides these, 29 towns are represented by one person, or place. It is singular that cities like Cleveland, O., do not have a single person worthy to be placed among the officials of this International Congress. So also, in Canada, Toronto and all other cities are left out, and the entire selection made from Montreal.

It would seem that the Congress could only get the proper material for its officers from about eight cities, and the army and navy. No doubt the gentlemen making up the list of these officers did the best they could, and if material was all confined to so few places, they are not to be criticised for selecting it all from the same.

2. In another way the scarcity of material with which to officer this Congress is apparent. For instance, Dr. H. C. Wood, of Philadelphia, is a member of the General Committee, member of the council of section twelve, and president of section seventeen. So of many other gentlemen, they are given from two to three official positions. Clearly this indicates either a remarkable aptitude on the part of these special individuals, for the duties of these several positions, or else that there is a lack of other members in the profession qualified for such duties. As to a considerable degree this selection of the officers of this Congress is an estimate of the committee who made the appointments, of the relative fitness and availability of the members of the medical profession for the special duties assigned them, the lists to which we have called attention have an especial interest.

That the appointments made are fitting, we doubt not, and that the appointees will so do the work intrusted to them that the American profession will be honored we fully believe.

Shall Physicians Give the Public the Details of Cases They Are Treating?

We have always supposed this was ungentlemanly, as well as unprofessional, harmful to physician, patient, and public. But the readiness with which the secrets of the sick chamber have been given to a gaping public in the case of General Grant lead us to reconsider the question. While we were in this mood, we chanced to pick up Cathell's work, and from it read the following:

"Do not let your wife or anyone else know your professional secrets, or the private

details of your cases, even though they are not secrets; few persons like to have told from house to house what they said in their delirium, or how they shrank from leech bites, or gagged at a pill, or to have their whims, fancies or weaknesses exposed."

There is no end to the mortifications, compromises and estrangements a physician's prying wife may bring him into. Nothing is more mortifying or hurtful to the feelings of sensitive patients than to hear that the details of their case are being whispered about as coming from the physician or his wife, or others whom she has told.

If you allow yourself to fall into the habit of speaking too freely even of ordinary affections, or submit to be indiscriminately interviewed by chatty people concerning your patients, your very silence in disreputable cases will betray them. The credit of whole families and the character of individual members will sometimes be at stake, and unless you shut your eyes and do not see too much, and your mouth and do not say too much, it may ruin them and involve you. Observe reticence at your visits and do not mention the private affairs of anybody from house to house. Seal your lips to the fact that patients have or ever had venereal diseases, hemorrhoids, fistula, ruptures, leucorrhœa, or constipation, or that abortions or private operations, etc., have taken place, or that any person takes liquor or anodynes, or that Mrs. — had a baby too soon after marriage, or that Mr. — had such a bad habit, etc. If patients desire their secrets told, or their private affairs, let them do the telling. You have no right to tell the affairs of any patient to any one without their consent."

The general principle is that the best success of the physician in curing his patient, depends on the perfect confidence of the patient. This perfect confidence gives the physician much of the hidden life of the patient. Unless they believe that he will keep inviolate their secrets, patients will not unvail themselves to the doctor. Hence the doctor will work in the dark and at a perpetual antagonism to the disease. So in the very nature of human thought and feeling, every consideration calls upon the doctor to keep within his own head all details of his individual cases, in so far as the public is concerned. This is sometimes called ethics, but if so it is simply common sense.

In Grant's case it is common to hear the laity discussing cancer and the modes of its treatment, and the special treatment adminis-

tered. Lots of people think the poor fellow has been killed by the doctors because the doctors report observations made so frequently. How could helive and be disturbed so often, they say? We know of excellent doctors who failed to get and to keep practice, because they told too much about what patients they had to other people. Others had failed to gain a practice at all commensurate with their abilities, because of the same habit of gossiping.

The Paris correspondent of the *Brit. Med. Journal* recounts a trial in which professional etiquette was the basis of charges. A well-known doctor was reproached in one of the secular papers for having sent a celebrated painter to a distant land for his health when he was suffering from syphilis. The doctor replied in the same paper, saying that the painter did not have syphilis, but died rather from cancer of the stomach. The doctor was now summoned to trial for violating the secrets of his profession. He was condemned to pay a fine of twenty dollars. The editor who published the doctor's letter was also condemned to pay a fine. What would be the fine of General Grant's doctors if the same professional law prevailed here as in Paris. There is no ethical code in Paris.

The Gospel of Rest.

Americans are noted for their unrest. Most are of a state of perpetual feverish activity from birth to death. It matters little for our purpose, which theory of the causation of this unrest we accept. It may be that the climate is to blame, possibly the enormous consumption of alcohol, tobacco, tea and coffee, have something to do with the turmoil of life. Perhaps the social state of the people lies at the basis of the difficulty. Doubtless, all these and other elements enter into the problem. As a result, however, we constantly observe neurasthenic people. The teacher of the doctrine of neurasthenia was himself the type of a neurasthenic person, the late Geo. M. Beard.

What shall be done to prevent this characteristic of Americans? What shall be done to cure the neurasthenics? Rest to all is the condition of prevention and of cure. But what kind of rest? At this point there is a great divergence of opinion. To the person able to take out-door exercise, rest consists in as total a change of all his habits of business life as is possible. For the cure of the evils

of civilization, the conditions of the man of the woods are best. Failing in this, the nearest approach that is possible should be sought. Beyond a doubt, the mass of people can never take even a week's vacation during the entire year. But there are few who cannot get one or more hours daily or weekly, in which they may have a complete rest, in walking, riding, rowing and in a thousand other changes of activity. With judgment and persistence, it is possible for each life to get a rest for some of the time, and so protect itself against the inevitable results of a life of unrest.

But there is a class of invalids, requiring a peculiar kind of rest. Dr. S. Weir Mitchell introduced its several features to the profession and made them popular. To his views of rest for this class of persons, we desire to call especial attention. We quote from the last edition of his work on nervous diseases, pp. 75, etc. With him rest means far more than saying "go to bed and stay there." It means care that letters bring no worrying news, that they are brief and of such kind as a nurse may read aloud. It means absence of all possible use of brain and body. It means neither reading nor writing, at least for a time, with exceptions in cases where, as is rare, there is no asthenopia. If the nurse can read to the patient, and reading be borne without fatigue, let it be used at first for only a few moments at a time. If this wearies, let the nurse cull from a paper interesting bits of news and talk them to the patient instead of reading. This tires the patient far less than reading. Let the nurse feed the patient.

The uses of this rest in a therapeutic point of view, are interesting and important. The necessity for massage, and electricity as part of this rest, is made fully apparent. No doubt the slipshod manner in which this rest is sought makes the seeking oftentimes a source of harm, rather than of benefit. But this is no objection to the method, only an additional argument in favor of its proper execution.

All physicians see cases in which it is needful to procure local or general rest, in order to accomplish the best results of treatment. In fact, to give rest in the broadest sense of the term, is the end sought in most cases of disease. Mitchell's plan in all of its details will apply to but relatively few cases, but in many of its details it will apply to an infinite number and variety of cases.

One third of the world's literature belongs to medicine and allied sciences.

The Old-Time Medical Student and His Master.

The *Medical Times* publishes the following indenture. Can a better one be devised at the present day?

"This indenture witnesseth, that Edward O., of the town of Falmouth, in the county of Cornwall, by and with the consent of his father, doeth put himself Apprentice to James X., of said town of Falmouth, Surgeon, to learn his art, and with him after the manner of an apprentice to serve from the second day of March eighteen hundred and eleven, the full end and term of five years from thence next following, to be fully completed and ended.

"During which time the said apprentice his master faithfully will serve, his secrets keep, his lawful commands everywhere gladly do. He shall do not damage to his said master, nor see to be done of others, but to his Power he shall let or forthwith give warning to his master of the same. He shall not waste the goods of his master, nor lend them unlawfully to any; he shall not commit fornication nor contract matrimony within said term. He shall not play at cards or dice tables, or any other unlawful games by which his said master may have any loss, with his own goods or others, during said term, without the license of his said master. He shall neither buy nor sell; he shall not haunt taverns or play houses, nor absent himself from his said master's service day or night unlawfully, but in all things as a faithful apprentice he shall behave himself towards his said master during all the said term.

"And the said James X. for the consideration of the sum of forty pounds lawful money of Great Britain, one moiety of which to him in hand paid, the other moiety when half the term is completed the said Apprentice in the Art of Surgery and Physic, which he useth by the best means that he can, shall teach and instruct or cause to be taught and instructed. Finding unto the said apprentice sufficient meat, drink, lodging and all other necessities during the said term.

"And for the true performance of all and every the said Covenants and Agreements, either of said parties bindeth himself unto the other by these Presents.

"In witness whereof, the parties above named to these indentures interchangeable have put their hands and seals this 22d day of March, and in the fifty-first year of our Sovereign Lord, George III, by the Grace of God of the United Kingdom of Great Britain

and Ireland, King, Defender of the Faith, and in the year of our Lord one thousand eight hundred and eleven.

"Signed, sealed, and delivered in the presence of

"I. Griffin."

The average medical student, if asked to study five years before beginning practice, would certainly be struck dumb with amazement.

A Wall from Toledo, Ohio.

It is of interest "to see ourselves as others see us," occasionally. In a business point of view, it seems to outsiders a ruinous plan to set up in business a vast number of competitors, when there is scant business for ourselves. From doctors there arises all over the land, the cry, "the profession is overcrowded." Still the profession devotes its leisure hours to the task of still farther increasing the crowd by making thousands of new doctors yearly. A gentleman, prominent in the profession, lately resigned his chair in a medical school because he found his own students settling about him, and absorbing his business.

But our design was simply to quote the view of a druggist of Toledo (*Weekly Drug News*, March 21, 1885). "A short time ago one of our medical colleges (we have two of them for 60,000 inhabitants) turned out eight or ten M. D.'s (mule drivers). Most of the professors—how sweet the title sounds to them—are complaining of lack of patients, and therefore turn out as many M. D.'s as possible. Now most of them are Toledoans, or from near by, and expect and actually do locate right here in town, much to the benefit of the aforesaid professors—who profess to be what they are not—and the druggists, who are sorely puzzled to read their prescriptions."

The consolidation plan has not yet reached Toledo. Yet as it began in Cleveland several years ago, and is now in Detroit, Toledo surely should not be passed by. In Columbus one of the two schools is going up and the other down. To an outsider, the prosperous school is the one which has a high standard and tries to live up to it. We still believe that a school that aims to first of all make a reputation for the best teaching, will come out ahead in the long run. No friend of the profession desires such schools abolished, but the same persons do desire that all schools that have a name simply should die as soon as possible.

Cholera Suggestions from the Sanitary Council of the Mississippi Valley.

The valley of the Mississippi is likely to be the field in which cholera will thrive most luxuriantly. Hence, the sanitary workers in this valley have met in council to provide what agencies they have in hand to make the entrance as difficult as possible, and its ravages as harmless.

It believes in a rational quarantine, based upon all the circumstances attending each ship that seeks entrance to the river. Hence, it recommends the placing of revenue cutters at the mouth of the river to intercept all vessels coming from infected ports, and the sending of these to some refuge station, there to be over-hauled and rendered wholesome, before proceeding upon their courses. It desired that the government instruct the consuls at the various infected countries, to give each ship departing for this country the usual bill of health, but also full information respecting prevailing epidemics. In short, all measures should be used to prevent the shipment of any cholera germs from any port where the disease prevails. Vessels should be thoroughly cleansed before receiving their cargoes from foreign ports.

The council desires that the president of the United States should convene the National Board of Health, and place at its disposal the money left with him by congress for the prevention of an epidemic of cholera, and relieving those attacked by it, and give it instructions to bring every known means into requisition, to guard the people from cholera.

If cholera or yellow fever does occur, the members of the council will inform each other of the exact facts. The council decides upon the symptoms and post mortem appearances which it will recognize as cholera. It finally determines upon the issue of a popular address upon this subject.

Altogether, this is a wide-awake body of sanitarians, and it is well that it is wide awake, as it has a deadly foe to deal with. It remains to be seen whether the government will recognize its wishes and accede to them.

The December Meeting of the Public Health Association.

This meeting is announced to occur in Washington, D. C., from the 8th to the 11th, inclusive. Seven topics are announced for discussion, viz:

1. The best form in which the results of

registration of diseases and deaths can be given to the public, in weekly, monthly and annual reports.

2. The proper organization of Health Boards.

3. Recent sanitary experiences in connection with the exclusion and suppression of epidemic disease.

4. Healthy homes and foods for the working classes.

5. The sanitary conditions and necessities of school houses and school life.

6. Disinfection and individual prophylaxis against infectious diseases.

7. The preventable causes of disease, injury and death in American manufactories and workshops, and the best means and appliances for preventing and avoiding them.

The last four of these topics, are the bases of eight prizes, first and second. The first prize is \$500, and the second \$200.

The money for the prizes was given by a Rochester gentleman. It is expected that in this manner greater interest may be awakened in the subjects. Twenty-eight hundred dollars awarded in prizes will doubtless awaken some intellectual activity. It strikes us that better essays would have been gained had there been but two prizes offered, to be given only in case the judges deemed the essays presented worthy. The actual cost of making an elaborate investigation is really very large, and \$500 would scarcely make a beginning. But the prize essays will doubtless be as good as the prizes offered, and this is all that could be expected.

All queries will be answered by Dr. Irving A. Watson, of Concord, N. H.

The Water Supply of Philadelphia.

The water supply of every town is a subject of vital importance. No other question is surrounded by greater difficulties. Towns large and small usually grumble at the expense attendant upon establishment of proper water works. It so happens that the geological formations of the sites on which most towns and cities are built, are such that it is impossible to get water from wells, even Artesian, without more or less pollution with the drainage of the town. Hence it has become imperative to get water from distant sources. As the country becomes more densely populated, these sources must be farther and farther removed from the town.

Philadelphia is now passing through an agitation preliminary to the securing of a

better water supply. The *Medical and Surgical Reporter* quotes some statements of the chief of the Water Department of that city. The present supply of water is from the Schuylkill river and wells. This river drains a valley containing 350,000 persons, with the animals associated with them. All the fæces and urine from this vast army of people and animals, flows into the Schuylkill and the citizens of the city of brotherly love drink the same. Into the pool which contains the greater portion of the city's water supply flow the contents of four sewers over two miles long which have been operating for generations.

As to the wells of the city, there are thousands in a polluted state. Col. Ludlow recommends the procuring of a supply of water from the Delaware river, at a distance from the city of about 30 miles. The cost of this is said to be the obstacle to its adoption. But this is only about \$7,500,000. If cholera can be nourished and extended by bad water, Philadelphia furnishes a most inviting field for its operations.

But there are few cities whose water supply does not want constant watching.

Alteration of Condition of the Bile as a Cause of Biliousness.

Dr. T. Lauder Brunton, in the course of a lecture upon the disorders of digestion, calls attention to a cause of biliousness little thought of, viz: Alteration of the bile itself. He thinks that the alkaloids formed during digestion change the character of the bile composition. Of course all the details respecting this change are not yet worked out. But there is a biliousness with clay colored stools, and biliousness with stools either normal in color, or dark. In one case there is an absence of bile, and in the other an excess of bile.

Salicylate of soda both greatly increases the flow of bile, and renders it more watery. Other substances of the aromatic series, especially toluylene-diamine greatly increase the amount of solids in the bile. These may do so to such an extent as to render the bile so thick that it will not flow through the capillaries of the liver, and jaundice results. Before it actually stops flowing it gives the fæcal masses a very dark color. It is not positively known that a similar action is exerted upon the bile by alkaloids formed during the process of digestion. Still it not infrequently happens that a number of

people in the same house are all taken with jaundice. This may be possibly due to injurious food.

The value of mercurial preparations in biliousness is unquestionable. But while it is true that part of the action of the mercurial is due to the sweeping out of the intestine the accumulation of bile matter, it is more than probable that it is by antiseptic action that mercury acts to prevent undesirable chemical changes in the foods undergoing digestion. Here is a vast field open to the explorer.

Who Desires Correct Thermometers?

For the past four years, the Thermometric Bureau of Yale College has examined such thermometers as their owners desired should be absolutely correct. A small fee was charged for the trouble, and a certificate was given as each thermometer was returned, indicating the exact reading of the scale.

From the report of this Bureau, just issued, it appears that there has been a large increase of the thermometers tested each year. Thus, the first year the total number of examinations was 1,957. Last year this number was 6,390. Of these, all but 64 were for physicians. During the first year 290 thermometers other than physicians' were examined.

Thus it appears that this Bureau exists for the convenience of physicians desiring perfect instruments. This is of interest, as it indicates that a greater number of doctors are seeking greater exactness in their observations. But when one remembers that near 90,000 doctors are in active practice in the United States, it will be seen that but a small proportion of them have accurate thermometers. It is appalling to contemplate the perplexity of that scholar who shall attempt to work up the records of cases observed by the aid of these incorrect thermometers, in the hope of getting any accurate law from the observations. But from the indications above given, it appears that we may hope finally to see in use correct thermometers as a rule.

Memoranda.

Cholera has reappeared at Toulon.

Austin, Texas, has a Histological society.

Buffalo has organized a cremation society.

In Russia marriage is forbidden between relatives down to the seventh degree.

Dr. P. V. Schenck, professor of gynecology

in the Missouri Medical College, died suddenly March 11th.

Dr. Brunton says that the most common causes of headache are decayed teeth and inequalities of vision.

The *Medical Record* says that "When a poor medical college feels particularly poor, it opens its doors to women."

Ellerslie Wallace, M. D., late professor of obstetrics in the Jefferson Medical College, died March 9th of facial erysipelas.

Three deaths from chicken-pox have been reported within the past year. Doubtless others occur which are not reported.

At her death Mrs. Mary Fletcher left two hundred thousand dollars to the hospital which she founded at Burlington, Vt.

Dr. T. Lauder Brunton holds that so long as a person is young and healthy he does not require alcohol, and is better without it.

M. Lefort says that in London, Eng., three per-cent. of the births are illegitimate, while in Paris they number thirty-three per-cent.

The *Chicago Med. Jour. and Examiner* quotes a distinguished pathologist as saying "No money can be made out of dead men."

The *American Journal of the Medical Sciences* is to be published in England simultaneously, under the editorship of Dr. Malcom Morris.

M. Coestu, of Paris, reports two hundred and eight cases of diphtheria, treated by large doses of calomel, with only twelve deaths.

Dr. Fenwick thinks that the fungus of cocaine solutions is liable to cause inflammations of the membranes to which they are applied.

Dr. T. Lauder Brunton says that schools of cookery for wives and servants would do more to abolish drunkenness than all teetotal societies.

Out of fourteen applicants for the degree of M. D. at the Medical Department of the University of Minnesota, only two passed the examinations.

Prof. Dixi Crosby, of N. H., used to say: "Whoso spitteth against the wind, spitteth in his own face." So is he that traduceth his professional brother.

It is asserted that the mental powers of the

inhabitants of Gheel have been greatly lowered by their constant association with the insane in the village.

Dr. E. P. Blake reports a case in which the irritation of a club-foot shoe caused a child to stammer. The removal of the shoe always cured the stammering.

Dr. Klein (*Boston Med. Jour.*) reports many cases of leucorrhœa in girls from ten to twelve, who had indulged freely in the pleasures of the skating rink.

Among seven thousand and thirty-one births in Prague, three thousand three hundred and twenty-nine are illegitimate; almost 50 per-cent. of all births.

Dr. Sheardown (*Northwestern Lancet*) reports that from an examination of one thousand prescriptions only nine were for the internal administration of alcohol.

The latest mode of suicide is to place a cartridge of dynamite between the teeth and then explode it. The *L'Union Medicale* reports a case. Happy Frenchman.

The *Brit. Med. Jour.* says that during the last four weeks of January one thousand cases of small-pox were reported in London. During the last fortnight eighty-two died.

The quarterly *Epitome of Medicine* thinks that "the use of chloroform to produce general anæsthesia should be prohibited by law, having a penalty equivalent to that of manslaughter."

Dr. Packard, in the *Medical Times*, says that antiseptic surgery is in a doubtful position, both as regards the principle upon which it is based, and the methods by which this principle is made practical.

In Paris vaseline is used in place of lard or butter in making cake. Cake thus made is said to keep indefinitely without harm. It is rendered antiseptic. The authorities do not approve of this vein of thrift.

Dr. Myrtle, in the *London Lancet*, reports the case of a man who died from sweating. The attack followed a three weeks' sickness from rheumatism. The sweating lasted one hundred and twenty-one days.

The first conviction of an opium joint keeper, in New York City, took place March 16th. He was given the highest penalty—three months' imprisonment in the penitentiary, and a fine of five hundred dollars.

Dr. Thomas thinks that no person should become a physician who has not a good physique, and who does not enjoy good health, because cases occur in practice in which human life depends more on the physical endurance of the physician, than upon his skill.

Ignaz Philip Semmelweiss, in 1849, fully developed the theory that puerperal fever is identical with pyæmia. Of him Schræder said: "Whenever we speak of the benefactors of humanity, we must mention, among the foremost, the name of Ignaz Philip Semmelweiss."

A student of medicine, aged seventy-four years, has just taken the degree of M. D. at Berlin. He had taken a course in medicine before studying theology. All his life was spent as a missionary until he returned to take his final course in medicine. He will return to his old missionary fields.

Dr. Jas. F. Brown (Reprint of N. H. State Medical Society) says that in rural communities of England medical visits are made for thirty-six cents, for short distances; obstetrical attendance, two and a half dollars. In London a doctor who charges over a guinea apiece for consecutive visits is rare.

Michaelis, Professor of Obstetrics, Univ. Kiel, whose work on the contracted pelvis is a classic, committed suicide because he was convinced that he had brought on the death of a near relative by infecting her from his making autopsies of persons dying of puerperal fever and attending her in confinement.

In his annual address, the president of the Cincinnati Academy of Medicine says that though the membership of the academy is over one hundred, the average attendance has been but eighteen to twenty. Worse still, but some eight or ten members are heard from all the year round, either by paper, or discussion, etc.

The answer to the question, "do your bowels move regularly?" is sometimes ambiguous. Thus Dr. T. L. Brunton says he found it so. On asking a patient thus, she replied, "yes." He then asked how often they moved, when she replied, "once in three weeks." This was her regular time for the moving of her bowels.

Surgeon Curran (*Indian Med. Annals*) says that the brook Kedron, of Palestine, which in modern times has been nearly dried up, has recently for the first time in centuries

flowed in a copious torrent, evidently in consequence of the numerous enclosures of mulberry and olive groves made within the last few years by the Greek convent.

Graduates of American medical colleges: Iowa College of Physicians and Surgeons, 7; Medical Department Iowa State University, 43; Cincinnati College of Medicine and Surgery, 10; Medical College of Indiana, 33; Southern Medical College, 36; Medical College of Virginia, 19; Atlantic Medical College, 39; University of Maryland, 74; Columbus Medical College, 18.

From the *Tokio Med. Journal* we learn some facts as to the medical schools of Japan. The local government supports thirty-one schools, and private parties several others. The local governments support three hundred and fifty hospitals. Besides there are two hundred and ninety self-supporting hospitals. Of the local government hospitals one hundred and twenty-four are venereal.

The Columbus Medical College during the past three years has had respectively each year as matriculants, one hundred and twenty-three, seventy-seven and forty-eight. For the same years the graduates have been forty-six, thirty-five and eighteen. The *Columbus Med. Jour.*, in stating these facts, says "'Bossism' cannot long prosper either in medicine or in politics." Other colleges familiar to our readers can make a similar record.

The Cincinnati *Lancet* has been studying the amount of wealth contributed to Cincinnati, by the non-resident students of all the schools, medical or otherwise. It figures it at \$1,361,000. Of this sum the Ohio Medical College brings in over \$84,000; Miami Medical College \$50,000; Cincinnati Medical College over \$19,000; the Eclectic Medical Institute \$91,000; Pulte Medical College \$24,000; the Physio-Medical Institute over \$16,000.

The effects of the emotions upon different organs vary. Dr. Brunton says: Disgust affects the stomach, causing vomiting; fear, in some of the lower animals, and often in man, affects the rectum, causing defecation; compassion affects the small intestines, producing borborygmi; worry and anxiety, although they act upon the stomach and lessen appetite, appear to have a special influence upon the liver. They sometimes produce jaundice and not unfrequently glycosuria.

John Hunter is described as having been about of middle stature, of vigorous robust frame, and free from corpulency; shoulders high and neck short; his features were large and strongly marked; his eyebrows projecting; his eyes of light color, his cheeks high, and his mouth somewhat underhung. In dress he was plain and gentleman-like; his hair, which in youth was reddish-yellow, in his latter years was white and worn curled behind. Those who have seen either the portrait by Reynolds or the engravings of the same by Sharp will at once recognize this pen portrait.

The Medical Society of the County of New York claims that "membership in the County Societies may be exacted of every practitioner in the state upon due notice, under penalty of forfeiture of right to practice upon refusal. No active practitioner can resign from any county society, nor can any society accept the resignation of his membership." It would appear from this, which we quote from the *N. Y. Med. Journal*, that all members of the medical profession must join a county medical society in which they live. It is impossible for them to resign their membership. Such are the delights of medical laws.

Dr. Davies, in the *Miss. Valley Medical Monthly*, records a case in which accidents from the abuse of alcohol had been the rule of life of a man aged 52. While young he was several times saved from drowning; at 22 his arm was fractured at the radiocarpal articulation; in '64 he was shot in the thigh; in '76 he had a compound fracture of the fibula and tibia of his leg; then he dislocated both ankle joints; in '81 he had both feet frozen; in '82 he fell into the fire while drunk and was severely burned, so that the outer plate of both temporal bones necrosed, then he was poisoned, then again burned, and lastly he was shot through his left index finger.

Dr. James L. Little, of New York City, died suddenly of perforation of the vermiform appendix, April 4th. He was 49 years old. He was connected as a teacher of surgery with the College of Physicians and Surgeons of New York, the University of New York, and the New York Post Graduate School. He was connected with St. Luke's and St. Vincent's Hospital. He wrote many attractive articles on various surgical subjects. As a surgeon, he was far above the average; as teacher, he was popular and thorough; as a

citizen, he was foremost in all good work; as a man among men, he was the peer of the best. Many of our readers have as kindly recollections of him as ourselves, and mourn as sincerely the sudden departure of so good a member of the medical profession.

The *Weekly Drug News* reports a death from a mistake in putting 'up grammes for milligrammes. The prescription came from an oculist and called for 1- $\frac{1}{2}$ milligrammes of atropine in 30 grammes of water. It was marked "as directed." The verbal directions of the physician to the patient were to take a teaspoonful. Two doses were taken when the patient passed into a state of coma. The amount of atropine in each dose was nearly three grains. The druggist is said to have been a well educated one. It is easy to see how the mistake might have been avoided by farther care on the part of either doctor or druggist. Thus if the doctor had written all the ingredients in grammes, all would have been well. Had he written the directions, "teaspoonful every two hours," all would have been well, as then the druggist would have at once detected the error. On the other hand, had the druggist reflected upon the large amount of atropine in the mixture, on his reading of the prescription he would have detected the mistake and so averted the fatal issue.

The moral is, that full directions should be written with each prescription. The usual methods of writing should be employed. Drug clerks should investigate everything unusual in any prescription containing poisonous drugs.

[The druggist who compounded this prescription was regarded as thoroughly competent in his business, and had had several years' experience in dispensing prescriptions. He put the solution in a poison bottle, but did not put on, as was clearly his duty, a cautionary label, forbidding its internal administration.

Some of the teachers in the schools of pharmacy, probably from motives of personal friendship, have testified that the druggist could not be blamed for misreading the prescription. They instruct their students, it seems, that in prescriptions written in the decimal system, the quantities are *always* expressed in grammes. Fifteen milligrammes would be written 0.0015, never 1.5, as in this prescription. Addressed to medical students who expect to be prescribers, such instruction is justifiable. The object of introducing the metric system is, partly, by securing

uniformity in the mode of expressing all quantities, to reduce to a minimum the danger of mistakes. But for the man who is to read and compound prescriptions, written often, as in this case, by foreigners, no such arbitrary rules can be laid down. The student must be made so familiar with the system that he is in no more danger of confounding milligrammes with grammes, than he would be of mistaking cents for dollars, if, for example, he were to see nitre quoted at $15\frac{1}{2}$ cents per pound. If the prescriber had written simply 1.5 without the word milligrammes, there would of course be an excuse for the dispenser. If the article dispensed had been some harmless medicine, the unusual form of expression might mislead even a careful dispenser, whose knowledge of the metric system of weights had been obtained mainly from prescriptions written in the customary manner, but when the question concerns the dispensing of one of the most poisonous of alkaloids, and the quantity, as the prescription at first glance seems to read, is many times greater than is common even in prescriptions for external use, the druggist cannot be considered thoroughly competent if he does not reconsider his first reading, and discover his mistake.

We cannot exonerate the druggist—except so far as deficient instruction at the hands of men in responsible positions furnishes an excuse—and we may indeed put all the blame on him—physicians do this too often. But the doctor himself cannot escape just censure. It must be admitted that the prescription as written is an unusual one. One-fortieth of a grain of atropine is a very minute quantity of substance to deal with. That does not signify, because the pharmacist should be provided with appliances for weighing or measuring even so small a quantity of material as that. At any rate his natural ingenuity can be trusted to accomplish it in some indirect way, even in the absence of an assayers' balance. But will the apothecary believe that so minute a quantity was intended, if there is nothing to indicate that the writing was duly considered?

In our judgment, the physician ought in prescribing an unusually large or an unusually small quantity of a drug to call attention by some mark or sign to the circumstance, of course, in so doing, assuming the responsibility of all consequences. In such a case the druggist has only to obey the command of the physician, retaining in his possession the original prescription as his sufficient justi-

fication, should any subsequent inquiry arise. Of course, even in such a case as this, the apothecary may refuse to put up the prescription, if it seems to him positively a dangerous one—or may consult the physician personally before doing so. Finally, the physician neglected a precaution, which from his standpoint might have seemed in this instance quite superfluous, but which, in fact, would have saved the life of his patient. Had he directed on the prescription a teaspoonful dose, no druggist would have dispensed 23 grains of atropine in an ounce mixture. We cannot insist that foreigners in our country should learn our system of weights and measures before prescribing, but we ought to demand that every prescription should have such explicit directions with regard to the dose or mode of use as shall help the apothecary to work in harmony with the physician. Many who read these words are in the habit of writing on their prescriptions, "Sig. Take (or use) as directed." It is a dangerous practice.

A. B. L.]

Editor's Book Table.

Mitchell on the Nervous Diseases of Women.*

The second edition of this work is now given to the profession. Having been long out of print it will be cordially welcomed by those interested in this portion of medical study and practice. There are few books that have exerted a greater influence upon the treatment of a considerable number of the diseases of women. This influence being based upon sound pathological and physiological data, is likely to abide as a permanent contribution to the healing art.

The first portion of the book is considerably altered. New lectures are added upon the difficulties of diagnosis in hysterical diseases of the joints, on the relations of hysteria to organic diseases of the spine, and on hysterical diseases of the rectum. All these but farther enforce and illustrate the principles of diagnosis and treatment laid down in the first edition.

Under the head of "Chronic Spasms" he

*LECTURES ON THE DISEASES OF THE NERVOUS System, Especially in Women. By S. Weir Mitchell, M. D. Second edition, revised and enlarged, with five plates.

Philadelphia: Lea Brothers & Co. 1885.

Cloth, pp. 287.

For sale by Phillips and Hunt, Detroit. Price \$1.75.

describes a curious form of ptosis. It is distinguished from the violent spasm of the lid due to some disorder of the fifth nerve, by the fact that it is simply a quiet shutting of the lid and a resistance on attempting to lift it with the fingers, and an absolute incapacity for a time to raise it by the will. As an illustration is the following: The patient was a woman of great intelligence and remarkable accomplishments, who had probably injured her brain by excessive study. She had no disease of the eye proper, nor any organic malady, nor was she a notably nervous woman. She had, however, been from childhood a shy person, subject to blush too easily, and at times excessively embarrassed by the presence of strangers. The ptosis appeared first while she was at a watering place. When sitting down at dinner she observed that a great number of persons were looking at her as the last arrival. As she was mentioning this fact to her husband she was attacked by a violent closure of the eye, and was led in this condition from the table. This was repeated so frequently that at last it was quite impossible for her to go to table in the room with other people. She was finally cured by travel and obstinate determination to overcome the difficulty.

He summarizes the treatment so firmly connected with his name thus: "It consists in an effort to lift the health of patients to a higher plane by the use of seclusion, which cuts off excitement and foolish sympathy; by rest so complete as to exclude all causes of tire; by massage, which substitutes passive exercise for exertion; and by electrical muscular excitation, which acts in a somewhat similar manner to massage, and with it by depriving rest in bed of its essential evils leaves only its good. These means allow us to over-feed our patients and to enable them to digest with ease large amounts of food."

The final result of all the treatment suggested he states thus: "If it be successful it reasonably increases the bulk of the body, it improves the moral and physical tone, and cures anæmia. These changes are obvious in some degree early in the case. The flesh shows first in the face, and the gain in blood in the pink of the finger nails, which I am apt to watch and note. I have been asked many times if these cures are permanent, and after a careful review of some hundreds of cases I am able to say they are quite as lasting as the cures of any nutritive defects obtained in more ordinary ways. It is a plan, in my opinion, never to be used where

exercise, outdoor life, tonics or change have not been fully tested; but where these have failed it leaves us with a novel resource without which no case of broken constitution, nervousness, or old hysteria, should be left to hopeless invalidism, and to a life in bed or on a lounge. I never use it if I can do without it; but in well-chosen cases I use it with a confidence which becomes alike courageous and habitual."

The book should be read by every doctor, of every sort. It is full of suggestion.

Cathell on the Physician Himself.*

The fourth edition of this work is now offered to the profession. It has been a wonderful success. Yet it could scarcely be otherwise, as it offered the elements of success to a profession overcrowded, underpaid, demoralized in vast numbers of its members, full of those who seek only financial success. To this motley group of near an hundred thousand it came, offering to tell the secret of success, in addition to scientific attainments. Eagerly the several editions have been bought. To each additional pages were added, until the work has attained considerable size. The last edition is said to contain three hundred new suggestions. We were greatly interested in these, and think they will interest any professional man. Respecting office students, he says that each doctor should be very cautious how he induces young men to study medicine, as there are three doctors where one is now needed, and their misconduct or unfair rivalry may work personal injury to the preceptor. Besides, office students are in the way of the proper duties of the doctor, and take his mind from his proper studies. If they are taken, they should be charged one hundred dollars per year, and be of reputable character, have good sense, mental and physical vigor, honorable ambition, and a good literary and scientific education. No person should be admitted as a student who begins the study of medicine from the belief that it is a pleasant pastime, or that it is less laborious than other callings, or that a diploma may be easily obtained, or that it is a royal road for money-making, etc. If these suggestions were put into practice by the physicians of the land,

* **THE PHYSICIAN HIMSELF, AND WHAT HE SHOULD Add to His Scientific Attainments, in Order to Secure Success.** By W. D. Cathell, M. D., Baltimore. Cloth, pp. 184. Price, \$2.00. Published by Cushings and Bailey, Baltimore, Md.

and the medical colleges, all needed reforms in the medical profession would be at hand.

In this time, when public positions are sought so strongly by doctors, the following advice is worth consideration: "Hesitate even to take such offices as vaccine physician, coroner, dispensary physician, sanitary inspector, etc., in a section where you expect to practice in the future. All such functions seem to dwarf one's ultimate progress, and usually create a low grade reputation that it is hard to outlive. To many people all such offices look somewhat like a confession of impecuniosity, or inferiority, and create an impression that is not overcome for years. If you have any merit at all, private practice industriously followed, will lead by better roads to speedier success." But the character of the work is sufficiently well known, and no doubt it will find its way into such libraries as it has not yet reached. As a whole, the teaching of the work is exceptionally free from objection.

Transactions of the New Hampshire Medical Society.*

This report contains fourteen papers, addresses, and reports, with the usual secretary's reports. Among the papers we were struck with one by Dr. Bancroft on the causes of insanity. From the records of the old New England families he has been able to procure many valuable data. Thus he gives a history of a family, the first record of which was the birth of one in 1725. He married a woman who committed suicide. From this we have a record of four generations. In these there were seven cases of suicide, six cases of insanity without suicide, several cases of suicide in the collateral branches of the family.

Another case was that of a woman of feeble health, delusion, and typical suicidal melancholia. The family records showed that her maternal grandfather descended from old Puritan stock noted for its longevity. He himself and another brother lived to be one hundred years old. At eighteen years this grandfather contracted syphilis; he was very sick and his health much impaired. He had several attacks of corneitis, which resulted in marked ulceration of the cornea, and almost total destruction of the eyesight. But in spite of this he lived to be over one hundred years old. After three generations of this

stock all that remains are four females, two of whom have had malignant disease, one has grave hysteria, and one has been insane; and two males, one feeble old man eighty-four years old, whose children are all dead, and one who for years was subject to chorea.

From facts such as these he reaches the conclusions: 1. Insanity is in the majority of cases a disease resulting from certain pre-established family conditions, certain proclivities and tendencies which operate as predisposing causes. 2. Insanity is a preventible disease in just so far as we can remove these predispositions or by a previous knowledge of their existence we can guide and warn the individual of impending dangers."

All the papers are thoughtful, and worthy of more attention than they are likely to receive in the form in which they are issued.

Transactions of the Maryland State Medical Society for 1884.*

This volume contains fifteen reports and addresses. All have more or less interest and show that the profession of Maryland are maintaining their old-time reputation. In his address upon dietetics, Dr. Pepper calls attention to the vast amounts of tea and coffee that are consumed. He says, "I am almost tempted to say that taking men and women into consideration, as much harm is done to health by the excessive use of strong tea and coffee as by alcoholic excess. My case books show many and extreme degrees of insomnia, of vertigo, and of various forms of cephalalgia due to this trouble." As illustrative of a wrong standard of living he gives the following: A good many years ago the late Samuel Jackson, Professor of Physiology in the University of Pennsylvania, then over eighty years old, in speaking to me of his past life and habits of work, said, "I got on very well up to a certain age, about forty years, when I began to find everything tired me, and it seemed as if I could no longer get through with anything, and I was in despair at my apparent failure. Turning my thoughts upon myself, it was not long before I found the trouble. I was a five-minute horse trying to travel in three-twenty. I changed my pace and have since rarely failed to cover a good day's journey."

*TRANSACTIONS OF THE N. H. MEDICAL SOCIETY for 1885. Pp. 213.

*TRANSACTIONS OF THE MEDICAL AND CHIRURGICAL Faculty of the State of Maryland. Baltimore. 1884. Pp. 248.

Report of the Massachusetts State Medical Society for 1884.*

This report contains, besides the usual record of the business part of the meeting, five articles. The first, by Dr. John Crowell, treats on the physician as a popular educator. To some points relating to sanitary matters he calls especial attention. But there is a vast field of the physician's work in this direction that he does not touch. In fact, all his life as a true physician and professional man, is that of a popular educator from house to house. That he does not do all he could in this direction is readily granted, but that he is constantly doing very much must be conceded.

Dr. Geo. W. Gay has a paper on "The Posterior Plaster Splint in the Treatment of Fractures of the Leg." Dr. F. Nickerson reports a case of chylous deposit in the abdomen. Dr. J. F. Adams presents a most interesting paper on "Sanitary Forest Culture," and Dr. Leonard Huntress discusses "The Pitch of the Percussion Sound."

Holden's Human Osteology.†

This appears as the January issue of the Wood's Library of Medical Authors. Of the contents of the work we spoke at some length in noticing another edition lately issued. All that was said then applies to the text of the volume before us. The work by this edition will be brought to a largely different set of readers and so aid in extending the boundaries of our knowledge of human anatomy. The reproduction of the illustrations is well done. The paper and press work of the volume is better than in any of the former series.

Kirk's Hand-Book of Physiology—Eleventh Edition—Second Volume.‡

To the first volume of this work we called

* MEDICAL COMMUNICATIONS OF THE MASSACHUSETTS MEDICAL SOCIETY FOR 1884. Boston. Paper.

† HUMAN OSTEOLOGY. By Luther Holden, assisted by James Shutter, F. R. C. S., M. A., M. B. Illustrated. Sixth edition. New York: William Wood & Co. 1885. Being the January issue of Wood's Library of Standard Medical Authors for 1885. Cloth. Pp. 275. Sold only by subscription—twelve volumes for \$15.00.

‡ KIRK'S HAND-BOOK OF PHYSIOLOGY. By W. M. Baker, F. R. C. S., and V. D. Harris, M. D. Eleventh edition, with about 500 illustrations. Vol. II. New York: William Wood & Co. 1885. Sold only by subscription in Wood's Library of Standard Medical Authors.

attention in a late issue of the DETROIT LANCET. The general nature of the scope of this volume is identical with that. The present volume discusses the vascular glands, the causes and phenomena of motion, the voice and speech, the nervous system, the special senses, generation and development. These volumes will form a valuable addition to any medical library.

Abstracts from Exchanges.

Prepared by A. B. Lyons, M. D., Walter P. Manton, M. D., and W. E. Chittick, M. D.

Diseases of Women.

PORRO' OPERATION—In Nov., 1884, Fritsch, of Breslau, operated by Porro's method on an exceedingly interesting case of generally contracted kyphoscoliotic pelvis. (*Centralblatt f. Gynakologie*, No. 1, 1885.) The pelvic measurements were:

Spinæ ilei, 25 cm. (10 in.)
Crista ilei, 23 cm. (9½ in.)
Conjugata externa, 15 cm. (6 in.)
Conjugata diagonatis, 9.5 cm. (3¾ in.)
Conjugata vera, 7.5 cm. (3 in.)

Besides the greatly lessened C. V., the left half of the pelvis was so contracted as to preclude all thoughts of birth by normal mechanism. As the patient desired a living child, after a preliminary treatment, consisting of a daily bath and thorough evacuation of the bowels, with 1.5 grams (22 grs.) of bismuth subnitrate the night before the operation, the cæsarian section was undertaken. The abdomen was first thoroughly washed with sublimate lotion (1:1000) and soap. After the incision had been made in the linea alba, the abdominal walls and peritoneum were included in large pressure forceps, so that not a drop of blood could get into the cavity. The uterus was then raised, according to Muller's advice, and towels wrung out in carbolic water were placed under it, to prevent the escape of fluid into the peritoneal cavity.

An elastic ligature was placed around the cervix, but this breaking, a thin rubber tube was substituted. Incision was then made through the uterus and a living child extracted. The uterus was then cut across just above the elastic ligature, and the cervix thoroughly divested of its mucous membrane by means of the scissors; the canal being thoroughly cauterized with concentrated carbolic acid, and the whole stump covered with iodoform; its peritoneal coverings were

brought together by numerous stitches over the wound; the whole stump was again dusted with iodoform; the elastic tube stitched to the cervix to prevent its slipping, and the whole returned to the abdomen. A tampon of iodoform gauze was also placed in the vagina.

The only after-treatment was the washing out of the vagina twice a day after the fourth day, when the tampon was removed, with sublimate lotion (1:1000). There were no untoward symptoms, and no rise of temperature took place, the highest being but eight-tenths of a degree above normal (37.8° C.). The sutures were removed on the tenth day, and on the 15th day the patient was dismissed with her child. The writer advises the extra-peritoneal treatment of the stump in all cases where the operator is embarrassed for instruments or assistants.

M

TOTAL EXTIRPATION OF THE UTERUS FOR CARCINOMA.—The results of total extirpation of the cancerous womb have not been as favorable as was expected when Freund first introduced his radical operation to the profession. The operation being so desperate an one, has, in the majority of cases, been postponed until all hope from other means has been abandoned; and the want of success in many cases may be attributed to this cause. But even in cases taken at an early period of the disease the majority have succumbed to hemorrhage, shock or exhaustion. Many cases, too, which have terminated favorably as far as the immediate operation was concerned, have within a few months suffered from a return of the disease. Considering the great mortality following this operation, it is with no little pleasure that we note the advancement which is making in the direction of improvement in Germany.

Dr. Bokelmann has a paper in the *Arch. f. Gynäkologie* (vol. 25, No. 1, 1884) reporting nineteen cases operated on by Prof. Fritsch in the Breslau Clinic. Of these nineteen cases, fifteen were discharged cured, one improved, one not cured, and two died—results which are very encouraging and speak well for the future of the operation. The method employed was that known as the "vaginal." Particular attention was given to arresting hemorrhage, each bleeding point being surrounded by a *stitch*. After the operation the vagina and cul. de sac were carefully wiped out with iodoform gauze on which iodoform was strewed. The peritoneum was not united by sutures, neither was

drainage employed. The vagina was packed with iodoform gauze, which remained until the third to the thirteenth day, when it was removed and the vagina carefully irrigated with warm salicylic lotion, or sublimate solution. This was repeated each day until the patient was discharged or died.

A less favorable, but later report comes from Turin (*Annali di ostetr. re* 1884, 1 *Set. Centralblatt f. Gynäk.* No. 10, 1885). Novaro has operated twenty-one times during the past three years with the following results: Ten deaths following the operation, five deaths later from a return of the disease, six are still alive, in three of whom the disease has reappeared. The method of Freund-Baldenheuer was used in one case, the other twenty uteri were removed per vaginam.

DANGEROUS HÆMORRHAGE FROM RUPTURE OF THE HYMEN.—Slight hæmorrhage from rupture of the hymen at the first conjugal approach is not an uncommon occurrence, but it rarely leads to serious results. The following case, reported by Zeiss, of Erfurt (*Centralblatt f. Gynäkologie*, No. 8, 1885), is therefore unique:

During the night following marriage the patient and her husband were startled at finding large spots of blood on the bedding. Investigation showed that blood was escaping from the woman's genitals, and an attempt was made to stop the bleeding with cold water and vinegar. This proving unsuccessful, Dr. Zeiss was sent for, but did not arrive till four o'clock the next day. At that time the patient was almost pulseless, blanched, covered with cold perspiration, and in a fainting condition. She was also "literally swimming in blood," a "lake of blood" being between the thighs and surrounding the pelvis. Examination showed that the hymen had been ruptured in two places—deepest to the left—and at this point a large vessel (1-1½ m. m. diameter) was spurting. This was surrounded by a stitch and the bleeding controlled. The patient made a good recovery under stimulants, etc. The stitch was removed on the third day; there was no subsequent trouble.

Zeiss also reports a case of rupture of the vagina during coitus:

The patient had been delivered of her second child. The puerperium was normal, and she was up on the ninth day. Six weeks after connection took place, during which the woman experienced a severe pain in the right hypogastric region; at the same time noticing an escape of warm blood from the vagina.

This hæmorrhage was controlled by rest and cold. Examination the next day revealed a laceration at the right upper portion of the vagina, 1 Cm. from its uterine attachment. The finger could be passed upward for some distance into the tear. Recovery, without reaction, was perfect under the use of iodoform and the ice bag. M.

LAPARO-ELYTROTOMY.—Another successful case of laparo-elytrotomy (*Annals of Surgery*, Jan., '85) is reported by Prof. Alex. J. C. Skene, M. D., of Brooklyn. This makes the fourth case reported by him, three of which have been successful, and the ninth on record. The patient, a woman aged twenty-one years, was taken in labor at 4 a. m., Oct. 4, '84. was seen by Dr. Pilcher at 8 a. m. He found the antero-posterior diameter of the strait to be less than two inches. He called Dr. Skene in consultation, and it was decided to perform laparo-elytrotomy. The usual incision was made in the left groin, and nothing unusual occurred except the dividing of the epigastric artery; this was secured by a Péan forceps. A little time was lost in dilating the os, which, before the operation, was apparently fully dilated. Version was performed, and a living child extracted, which weighed seven pounds. The placenta was delivered by contraction of the uterus, aided by external manipulations. The wound was closed by carbolated silk sutures, and a rubber drainage tube carried through the vagina. The patient made a splendid recovery.

This operation, in the opinion of Dr. Skene, is much to be preferred to cæsarian section. There is no danger from it. The only artery necessary to be cut is the hypogastric. The epigastric is usually on the peritoneum, and can be drawn aside with it. Care should be taken to have the os well dilated before operating. This can be done afterwards, but it consumes valuable time. The operator should be familiar with the parts, so that as he reaches them he will be able to at once recognize them. This should be learned by dissections, and not after the manner of paper anatomists.

The loss of blood is not more than in a normal labor.

With care the bladder need not be injured in the least.

ATRESIA VAGINÆ. VESICO-VAGINAL FISTULA: PREGNANCY.—Wyder reports a case (*Centralblatt f. Gynakologie*, No. 7, 1885) from the Berlin polyclinic, where with exist-

ing atresia vaginæ, conception took place, and the child was carried to term—the conditions being first discovered by the attending midwife during labor. Separation of the normal external genitals disclosed a firm, hard and fibrous structure, extending from the sphincter ani to the orificium urethræ. Two centimeters below this opening there was a small funnel-shaped aperture that would admit an ordinary uterine sound. The patient, 38 years of age, had borne a child 12 years before, and at that time had suffered a perineal rupture, which had healed under the application of plasters.

There was no difficulty in coitus, there being, according to the statement of the husband, complete immissio penis. Further examination revealed a dilated urethra, which would admit two fingers into the bladder. After incising the obstructing membrane, which was $1\frac{1}{2}$ to 2 Cm. thick, delivery was effected by the forceps. There was a history of a dropping of urine following the former delivery, and Wyder was now able to demonstrate the presence of an oval vesico-vaginal fistula, through which a finger in the bladder could be passed into the vagina. The conclusions arrived at by the writer are:

1. That the fistula had been produced at the former labor; the atresia of the introitus vaginæ being the result of the caustic plasters applied to the ruptured perineum.

2. That, from the fact that there had been no history of difficult coitus, and from the very dilated condition of the urethra found, it appeared that connection had undoubtedly taken place through this latter, and the semen escaping from the bladder through the fistula, had penetrated to the uterus. M.

REMOVAL OF UTERINE APPENDAGES FOR MENSTRUAL EPILEPSY.—In the February number of the *American Journal of Obstetrics*, Dr. E. F. Montgomery, of Philadelphia, adds another unsuccessful case of "Tait's" operation, for the relief of this disease. The operation reported here, was undertaken as a last resort on a girl 17 years old, who had never menstruated, but who had suffered from the epileptic seizures since her 13th year. During these attacks she was unconscious for from ten days to two weeks out of each month. On admission to the Philadelphia hospital, she was pale, anæmic, and extremely nervous—laughing or crying upon slight or no provocation. Bromides were not well borne, and a tonic treatment was at first adopted. An attempt

was also made to bring on the menses by electricity and the administration of nitroglycerine and tonics during the interval between the fits. These failing an operation was undertaken. This was successfully accomplished September 13. On September 27th the patient had four convulsions. No improvement was noticed until the 14th of October, when she had a well-marked convulsion, and from this date until the 29th she had from one to four convulsions a night. Since then the attacks have not been as frequent or severe as before the operation, and it is hoped that they may finally be entirely cured. M.

UTERINE INVOLUTION.—From the investigation of four puerperal uteri, Meola, of Naples (*St. Morgagni*,—*Centralblatt f. Gynäkologie*, No. 1, 1885), has advanced the following:

1. In the uterus of advanced pregnancy there is much connective tissue, which forms sheaths and trabeculæ between the individual muscle bundles and around their fibres.

2. This connective tissue grows during the puerperium changing from embryonal to the perfected form, and has the function of at first assisting in the nourishment of the muscles, but later causes their atrophy.

3. In the uterus of advanced pregnancy frequent changes in the vessel walls are noticed. These consist in a thickening of the middle coat of the arteries, and a swelling and proliferation of the intima of the veins.

4. The process of involution is to be regarded as a *simple granular atrophy*, and not as formerly supposed, a *fatty degeneration of the muscle elements*, and final absorption.

5. The hypertrophy of the connective tissue is the cause of the atrophy of the muscle fibres. M.

SUBCUTANEOUS INJECTIONS OF IRON.—Mortinetti (Florence)—(*Annali di Ostetr. etc.* 1884, August, September—*Centralb. f. Gynak.* No. 10, 1885) has tried in two cases of anæmia, in women suffering from *endometritis fungosa*, the intra-muscular injection of a solution ferri citratis (2) and aq. laurocerasi (20), a hypodermic syringe being injected each day. The gluteus muscle was selected. Of 26 injections made in one case, only one was followed by pain, and hardening of the tissues, and the formation of an abscess was prevented by the constant use of the ice-bag. The results obtained are reported to have been brilliant. M.

Ophthalmology.

GLAUCOMA PRODUCED BY HOMATROPINE.—It is well known that atropine, used in cases where there have been premonitory symptoms of glaucoma, is likely to bring on an acute attack of that disease. Homatropine, which is derived from the same source, though weaker in action, has in one case at least, produced the effect. Sachs (*Centralblatt f. Augenh., Edinburgh Med. Jour.*) reports this case, in which corneal haze, a semi-dilated motionless pupil, arterial pulsation, increased tension, diminution of central and peripheral vision—in short all the symptoms of a glaucomatous attack, followed shortly on a single instillation of homatropine. It speedily yielded to the antagonistic action of eserine, however, as was to be expected from the fact that this drug is also efficacious in cutting short the attacks of glaucoma produced by atropine, which, before it was used, very rarely yielded to any but operative measures.

Materia Medica and Therapeutics.

THE DIFFERENCE IN THE THERAPEUTIC EFFECT OF ELECTRIC CURRENTS, AND THE ELECTRO-DIAGNOSTIC EXPLORATION OF THE VISUAL FIELD.—In an exhaustive article on this subject, Dr. C. Engelskjön, of Christiania, draws the following conclusions (*American Journal of Medical Sciences*):

1. Experiments on patients suffering from vascular neurosis have shown that, in local applications to the skin of the subject, with the use of the electric bath, the two kinds of electric current exercise an inverse effect on the vessels; whilst the faradic current dilates the spasmodically constricted vessels, the galvanic current constricts the actively dilated vessels, the faradic current at the same time produces an increased, the galvanic a lowered, temperature. There seems to be no difference as to the action of the two poles of the galvanic battery.

2. The central application of electricity enables one to see, in analogous cases, of cutaneous vascular neurosis, a difference in effect between the two kinds of current, so that, in certain given cases, the cure may only be due to one of them, either the faradic or the galvanic.

3. Comparative experiments on patients suffering from hemiparesis and other central neuroses have also shown that the galvanic current acts contrary to the faradic, from a therapeutic point of view; whilst only one

of the currents, the positive, produces a cure in a given case, the other (negative) aggravates the disease. The difference in the effect of the two currents on the subjective symptoms is, in most cases, seen instantly, and is very striking. It is possible to neutralize the effects of one by the other.

4. As in the central neuroses, electricity acts in the same manner as in hemicrania, so that in certain cases the galvanic current alone, and in others the faradic current alone exercise a happy effect; whilst the treatment by the negative current has an injurious action, these neuroses appear, in analogy with hemicrania, to be of a dualistic nature.

5. The neurotic diseases of the ganglia of the great sympathetic, such as stenocardia, cardialgia, etc., behave, as regards electric currents, in the same manner as in diseases of the central nervous system.

6. Engelskjön has also seen cases certainly related, by reason of their symptomatology, to diseases accompanied by evident anatomical alterations of the central organs, and which do not behave in the least as neuroses with electric currents, though they are promptly cured with electric treatment.

7. It is more than probable that the peculiar nature of the etiological factors exerts a determining influence on the future form of a particular case, and that consequently the recognition of the etiological relations in a given case enables us to make a choice of the two kinds of currents.

8. The diseased state of the spinal ganglia may act in a reflex manner on the spinal cord, and give rise to spinal symptoms. In the same manner the diseased condition of the cord is, as is well known, capable of exerting a reflex action on the brain, and of causing cerebral symptoms. The progress of the reflex action is always from below upwards. In this connection it is observed that the organ secondarily attacked should almost always be treated by a current different from that used on the organ primarily diseased.

9. Engelskjön treated cerebral symptoms by electrization of the medulla oblongata, one of the electrodes being placed in the nuchal fossa, the other above the larynx. The spinal symptoms may be treated simply by conducting the current across the lower part of the cervical portion of the cord.

10. The well-known increase of morbid symptoms, caused by a long use of electricity, is due to the effect of the current on the healthy ganglionic cells.

11. Electrization of the brain, the spinal

cord, the ganglia, and the skin exerts a powerful influence on the functions of the retina; so much so that in certain given cases the positive current extends the visual field, and often increases, at the same time, the activity of vision. As these effects may be said to be direct, we may use electricity in exploring the visual field.

12. If one will submit his arms and forearms to the action of warm or cold water for a few minutes, the cold water will be found to produce, in special cases, the same effect on the visual field as the galvanic current, whilst the effect of warm water is the same as that of the induced current.

13. In this general action on the skin, cold and warm water exert, in such cases of a given disease, the same therapeutic effects as the galvanic and faradic currents employed separately. The effects of cold water are similar to those of galvanism, those of warm water to the induction current. If one will only recognize the kind of current suited to a special case, he is in a position to indicate the proper balneo-therapeutic treatment, and conversely, the good and bad effects of cold or warm water will serve to indicate the proper electric treatment.

14. There are cases of nervous diseases which, though generally amenable to electric treatment, can only be cured by central electrization, and grow worse under the influence of one or the other of the two kinds of currents. It is sometimes possible to cure certain cases in another manner, by electrization of the skin. Used in this way, electricity seems to act in two different ways: first, by acting on the skin itself; second, by acting on the peripheral nerves. The two kinds of currents act inversely in the first case, though not in the second.

15. In using the two kinds of currents on the peripheral nervous circuits in cases of neuralgia, Engelskjön has never seen any qualitative difference in their therapeutic activity.—*Oordiskt Medicinskt Arkiv.*, Bd. xvi., Hft. 4.

Practice of Medicine.

MEMBRANOUS, DIPHTHERITIC AND TRUE CROUP.—The April number of the *American Journal of Medical Sciences* contains an elaborate clinical study of true croup from the pen of Dr. J. Lewis Smith, of New York. He fully considers the etiology, anatomical, characteristics, diagnosis, prognosis, and treatment. Whatever the cause, the anatomical characters, the clinical history, and the re-

quired treatment are so nearly identical that attempts to differentiate the disease when produced by other agencies than diphtheria from that due to diphtheria, have proved futile and unsatisfactory in localities where diphtheria occurs, except in a few instances, as, for example, when croup has been manifestly caused by swallowing or inhaling some irritating agent.

Dr. Smith holds that inflammation of the laryngeal and tracheal surface, whatever its cause, whenever it reaches a certain grade of severity, may be attended by the exudation of fibrin and the formation of a pseudo-membrane, but such a result more frequently occurs in the inflammation caused by diphtheria than in that produced by other agencies. In diphtheria a moderate laryngo-tracheitis is attended by the pseudo-membranous formation. Dr. Smith's experience leads him to believe that no more than one in eight cases of croup has recovered by medical treatment which began in the first week of diphtheria, and in which the symptoms were so pronounced as to indicate more or less laryngeal stenosis. The exudation in the first week of diphtheria, or in its active period, occurs so rapidly, and in such large quantity, that no one of the medicinal agents or modes of treatment, which physicians commonly prescribe, is sufficiently prompt in its action to prevent the formation of the pseudo-membrane to an extent that soon endangers life.

Croup occurring in the second or third week of diphtheria, since it is attended by less abundant and less rapid exudation than when it occurs during the acute stage, can be more successfully treated under the persevering use of solvent inhalations, and a larger proportion than one in eight, perhaps one in three, recovers by the early and continuous or almost continuous use of inhalations.

Still the mortality is so large and the suffering so great in croup, at whatever stage of diphtheria it occurs, that we cannot rely on the slow action of medicines or inhalations, and surgical treatment is in most instances required to diminish the suffering, and afford the best chances for saving life.

Under the head of medicinal treatment he strongly recommends trypsin as a solvent of false membrane. Of calomel, he says: The experience of many physicians justifies the belief that mercury and especially calomel employed within certain limits in the commencement of a pseudo-membranous inflammation does exert some controlling action on this disease. That it did much harm formerly when

physicians prescribed it as freely as we now employ potassium chlorate, to the extent in many instances of increasing the cachexia and causing mercurialism, should not deter from its judicious use. In the ordinary form of diphtheria he would not advise the use of calomel, or would limit its employment to one or two doses of six to ten grains in the commencement of the disease in robust cases. But in croup, since the danger is not from the cachexia or blood-poisoning so much as from the laryngeal stenosis, which is apt to develop rapidly, that medicine is indicated, and should be prescribed, which most strongly retards the exudative process, and aids in liquifying and removing the pseudo-membrane; provided that it produces no deleterious effect which renders its use inadmissible. Hence it is proper to prescribe calomel in larger doses and for a longer time in the treatment of croup, than in other forms of membranous inflammation, if it fulfil the indication, as it seems to in a measure. In his own practice, however, calomel is not prescribed after the first or second day, since Dr. Smith prefers the use of other remedial measures, which are efficient, and are less likely to produce injurious effects. The subject of surgical treatment is also fully discussed, and Dr. Smith holds that we can claim for tracheotomy judiciously performed, and at a sufficiently early stage, the cure of one in every three patients in the average.

OBSERVATIONS ON THE REGENERATION OF THE VAGUS AND HYPOGLOSSAL NERVES.

—Since the time of Fontana the subject of the regeneration of cut nerves has been one of great interest and importance, and some experimental work has been done with more or less success. At the present time there seems to be no difference in opinion as to the fact that fibres of the cut ends of nerves will unite with similar fibres; and that the regenerated sensory nerve will still convey sensory impulses and the regenerated motor nerve motor impulses. In case, however, of the regeneration of sensory with motor fibres there yet exists considerable uncertainty.

In a very important paper which appears in *The American Journal of Medical Sciences* for January, Dr. Edward T. Reichert, of the University of Pennsylvania, records some experiments which were made to learn if the fibres of nerves of entirely different origin and function would unite, and if regeneration should occur to know the form of the return of function, or, in other words, to know if a

motor nerve was capable of conveying impulses peculiar to another motor nerve. The vagus and hypoglossal were selected as being nerves of distinct origin and function, and in case of regeneration would probably afford the best facilities for accurate observation.

The experiments were performed on dogs, and it was found that the motor fibres of the vagus in all of the five dogs operated upon had actually become united to similar fibers in the trunk of the hypoglossal, and that the hypoglossal fibres conveyed impulses which were peculiar to the vagus apparatus. Moreover, that in at least one dog (the others not being examined in this way) irritation of the sensory fibres in the hypoglossal trunk gave rise to impulses which were conveyed by the sensory fibres of the vagus to the vagus centres, and produced effects like those induced by excitation of the vagus trunk, thus showing in both instances that a motor or sensory nerve can convey impulses peculiar to another motor or sensory nerve of entirely different origin and function; and indicating that at least in some nerves the effects produced by impulses from the periphery are not dependent upon any peculiarity of impulses due to physiological peculiarities of the peripheral sense-organs or nerves through which the impulses are conducted, but upon the peculiar physiological properties of the nerve centres, hence we have respiratory movements, etc., occurring in the tongue brought about by impulses from the vagus centres through the hypoglossal nerve, and effects on the respiration, pulse pressure, and vomiting centre through impressions carried to the vagus centres by impulses generated in the hypoglossal.

Not only did Dr. Reichert find motor fibres of distinct origin and function united, but we find among the vagus fibres at least three physiologically distinct sets of motor fibres united with fibres of the hypoglossal, viz.: fibres conveying *inspiratory* impulses, fibres conveying *expiratory* impulses, and fibres conveying *oesophageal* impulses, the first two sets no doubt consisting of fibres of the vagus going through the recurrent laryngeal to the muscles of the larynx, and the latter set forming part at least of the fibres belonging in the same branch.

Another interesting fact to be noted is that the sensory fibres in the trunk of the hypoglossal at the point of union with the vagus in these experiments, are recurrent fibres (sensory fibres coming from the superior cer-

vical nerves through the descending branch of the hypoglossal and running from the branch towards the centre), and accordingly conduct impressions normally not directly toward the centres as is commonly the case with sensory nerves, but first peripherally, making a circuit, as it were, before reaching the centres; therefore, since the sensory fibres in the hypoglossal which united with the sensory fibres in the vagus, conducted impressions to the vagus fibres, it is obvious that these impressions were conducted in a direction opposite to that of the normal, thus offering corroborative testimony to the very interesting experiment of Paul Bert, in showing that sensory fibres can convey impressions in both directions.

POLIOMYELITIS ANTERIOR IN ADULTS.—Dr. Gustavus Eliot, of New Haven, records, in *The American Journal of the Medical Sciences* for January, a carefully noted case of poliomyelitis anterior occurring in an adult. The progressive development of muscular weakness, unattended by febrile symptoms, but accompanied by diminution of the size of the limbs, by abolition of the patellar tendon reflex, and by sensations of numbness, yet without loss of tactile sensation, and without interference with the function of either the rectum or bladder, rendered the diagnosis clear and indisputable.

A large proportion of the reports of cases which have been published contain little or no information concerning the details of treatment, and in many others the multiplicity of drugs prescribed renders any reliable conclusions in regard to the effect of each almost impossible. Bromide of potassium, belladonna, strychnine, ergot, and iodide of potassium have been most often employed, and most praised. Counter-irritation, baths, rubbing and exercise, and electricity are also included as important elements in most plans of treatment. From a careful study of the results of various plans of treatment as reported by various observers, Dr. Eliot deduces the following conclusions:—

First. Counter-irritation and ergot should be employed early in every case. *Second.* Massage and electricity should be used as soon as there is any evidence of improvement. *Third.* Little, if any, effect can be expected from iodide of potassium. *Fourth.* Belladonna and the bromides should be used only with extreme caution. *Fifth.* Strychnine should be entirely avoided.

Surgery.

OPERATIVE TREATMENT OF MALIGNANT AFFECTIONS OF THE RECTUM.—Professor Es-march (Kiel) read a paper on this subject before the International Medical Congress, (*Brit. Med. Jour.*) in which he laid down the following propositions: 1. In the treatment of cancer of the rectum, the same principles hold good as in the treatment of cancer of other parts of the body. 2. Extirpation should be as early and as complete as possible. 3. The more the surrounding healthy parts are removed with the diseased, the greater reason is there for hoping that recurrence will not take place at all, or will be long delayed. 4. Experience teaches that early and thorough extirpation may be followed by permanent recovery (Dieffenbach, Schuh, Billroth, Rose, Nussbaum, Kocher, Czerny, Bardenheuer, Holmer, etc.). 5. As, in cancer of the rectum, the lymphatic glands are secondarily affected at a comparatively late period, operation may be followed by permanent success when the disease has lasted some time and has become extensive. (Czerny observed recoveries which lasted above four years, although the cancer had been present three or four years). 6. The prognosis in regard to the return of the diseases is good in proportion to the slow development of the new growth, the delay in the appearance of the distressing symptoms, and the completeness of the operation. 7. The simple cylinder-celled cancers (destructive adenoma and adeno-carcinoma), which proceed from the more superficial layers of the mucous membrane, generally give a better prognosis than the forms with small alveoli, and the gelatinous forms, which more rapidly enter the deep submucous layers. The greater the disposition to gelatinous degeneration of the cancer, the more malignant usually, is the course. 8. Extirpation of a cancerous nodule from the wall of the rectum is sufficient only when the nodule is well circumscribed and movable, and when only a part of the rectum or of the anus is implicated. 9. In all other parts, amputation of the rectum beyond the points of the growth is indicated. 10. The entire rectum as far as the sigmoid flexure, may be removed with good result. 11. The principal dangers of the operation are, *a*, hæmorrhage; *b*, acute, purulent, and ichorous inflammation of the connective tissue (septic lymphangitis, retro-peritonitis, and peritonitis). 12. These dangers are to be combated: *a*, by very careful

hæmostasis during the operation; *b*, by very careful primary disinfection, and provision for the free escape of the secretions of the wound (by drainage and the avoidance of cavities). 13. In amputation of the rectum high up, opening of the peritoneal cavity is unavoidable, but peritonitis does not generally follow, if the opening be at once closed by suture, under strict antiseptic precautions. Drainage of the peritoneal cavity is indicated only in exceptional cases (for instance where considerable soiling of the peritoneum, during the operation, cannot be avoided). 14. The progress of operative skill has essentially diminished the dangers of the operation, the death-rate having fallen from 50 to 20 per cent., and even lower, and it is to be expected, with confidence, that this proportion will become even more favorable, as in ovariectomy, hysterectomy, etc. 15 The functional disturbance following amputation of the rectum is slight, in comparison with the distress caused by the cancer. Incontinence of the feces is not complete, especially when the external sphincter has not been removed. Systematic cleanliness and the use of a suitable apparatus for closure, commonly relieves the difficulty. 16. Resection of a portion of the intestinal tube in its whole circumference, followed by suture of the two ends of the intestine, is not to be recommended, since the lower portion of intestine generally sloughs. It is better to remove the mucous membrane of the lower end, preserving the external sphincter muscle, and to fasten the upper end of the amputated rectum by a few sutures to the lower edge of the wound. 17. Extirpation of cancer of the rectum is, in all cases, rendered easier by dividing the posterior wall of the gut as far as the coccyx. Removal of the coccyx is generally unnecessary.

POWDER MARKS IN CASES OF DOUBTFUL SUICIDE.—Dr. Fisk (*Boston Medical Journal*) concludes an able exposition of this perplexing subject thus:

1. From a great distance the entrance wound will usually be large and irregular; there will be absence of any great degree of lividity of its edges, and absence of powder marks. The wound of exit, if one be present will usually be larger than the wound of entrance. At any distance the edges of wounds of entrance will usually be inverted, those of exit averted.

2. From a short distance the entrance and exit wounds will generally be nearly equal

in size; the edges of the former will be blackened, and the powder grains will be embedded in the skin, but there will be absence of the scorplings and brandings of powder.

3. Close to the body the entrance wound will generally be larger than the exit. There will often be, in addition to the tattooing of the skin by unburnt grains of powder, a mark or brand made by the flame of the gases and of the burning powder, by the soot of the partly burned powder and by the residue of ash of the wholly burned powder. As a rule this brand, which may consist of a burning alone of the hair, the skin, or of the clothing, or of a burning and blackening of the skin or clothing will appear at one side of the bullet hole.

The position of the weapon is to be determined by the following rule:

When the brand appears upon the hair, the skin or the clothing at one side of the bullet hole, hold the weapon with its muzzle to the bullet hole so that the line of its hammer and sight will meet a line drawn from the centre of the bullet hole through the centre of the brand and it will show the exact position of the weapon when fired.

Accidental wounds are generally near wounds. When inflicted from a distance they cannot be distinguished from homicidal wounds. In shots fired near by, when a person is known to have been shot standing, an unnatural position of the weapon, as shown by the location of the brand, will tend to corroborate the claim of accidental shooting. So if one is known to have shot himself an unnatural position of the weapon will show that the shot was probably accidental. The location of the wound and the course taken by the ball may also characterize the wound as accidental.

To distinguish homicidal from suicidal wounds Dr. Fisk gives the following:

When the location of the brand, relative to the bullet hole, shows that the weapon has been held in a position of its hammer and sight impossible or improbable for a suicide it is probable that a murder has been committed. Certain relative locations of this brand may also indicate that the victim has been shot while in a reclining position.

Multiple wounds are usually homicidal, but may be either accidental or suicidal. Shots fired beyond the usual suicidal limit are probably homicidal.

It is said that the suicide rarely holds the muzzle of his pistol more than eight inches from his body. Suicides generally fire at the

side or front of the head, next to the heart; sometimes at the back of the head. The distance from the body at which the weapon must be held to show the brand plainly is very nearly as follows: For small pistols and revolvers, not over four to six inches; for large weapons of this class not over twelve or fourteen inches.

IS THE OPERATION FOR TRACHEOTOMY IN DIPHTHERITIC CROUP DANGEROUS?—Dr. J. F. Winter (*N. Y. Med. Jour.*) in an interesting paper has reached the following conclusions:

1. Tracheotomy of itself performed with care involved little if any danger to life.

2. Accidents during the operations generally resulted from a want of care.

3. It prevented asphyxia, and thus gave more time for the administration of remedies and to enable the system ultimately to throw off the disease.

4. It prevented laborious and rapid breathing, thus tending to prevent exhaustion.

5. It allowed of a free supply of air and thus assisted in curing the original malady.

6. It was a simple resource by which the condition of the patient was not likely to be rendered worse.

7. Having made a diagnosis, we should not delay the operation, as this was the chief cause of failure in unsuccessful cases.

8. We should operate slowly, deliberately, and without hurry, and not lay open the windpipe at one sweep of the knife.

9. It was seldom that either the constitutional condition or special causes contra-indicated the operation.

10. It alleviated suffering.

11. It mitigated symptoms.

12. It prevented complications.

13. It never added to the dangers of the original disease.

14. Statistics showed that nine-tenths of the patients requiring the operation were suffocated without it.

15. No patient who had lived without the operation would have died had it been performed.

16. The dictates of conscience, of facts and of common humanity united in demanding the operation.

In discussing the paper, Dr. J. H. Ripley said that the danger did not consist in the operation but in the condition of the child and in the circumstances under which the operation must usually be performed. We had to deal with children suffering from sys-

temic poisoning and stenosis of the larynx, with the cellular tissue of the neck infiltrated with the products of inflammation, sometimes swollen out even with the chin, and in order to get at the trachea, we had to cut down perhaps two inches, which required a good deal of time and a good deal of care, and before the operation was completed the child was liable to die of apnoea; if chloroform was not given, the child would die from struggling. He was willing to stand with the small minority which includes such names as Holmes, Gross, and Billroth, and say that he regarded the operation dangerous. He had performed tracheotomy about one hundred and ten times, and seen it done by other men about fifty times. He had known ten deaths occur on the operating table, the operations being performed by seven different men, four of whom were careful and experienced operators. In one instance the operator had plunged the knife into the spinal column, in another into the œsophagus, in a third it was plunged quite through the trachea at one side of the median line. As to early operations he admitted that he who did such operations would have best success for the reason that very many unnecessary operations would be done.

ON CALCULUS IMPACTED IN THE URETER, AND THE FEASIBILITY OF REMOVING IT BY SURGICAL OPERATION.—Mr. Henry Morris, Surgeon to the Middlesex Hospital, London, in a very interesting paper in the October number of *The American Journal of the Medical Sciences*, discusses the feasibility of removing from the ureter an impacted calculus, which, if allowed to remain, will sooner or later surely cause destruction of the kidney, if not of life. He discusses very fully the clinical history, diagnosis, and prognosis of these cases, and finally urges that a calculus impacted in the ureter sufficiently near the vesical orifice to be felt with the finger can with care and suitable instruments be extracted through an incision of the bladder wall without fear of wounding the peritoneum, or laying open the cavity of the bladder into the cellular tissue of the pelvis.

He describes his method of operating as follows: Having rapidly dilated the urethra if the patient be a female, or opened the urethra in the median line immediately in front of the prostate if the patient be a male, the neck of the bladder should be passed by the index finger of the left hand, and a careful digital examination made of the bladder

walls. If a hard fixed body be felt covered over by the bladder mucous membrane, at or near the orifice of one of the ureters, a gum-lancet shaped knife on a long slender shank should be introduced along the left index finger, and with it an incision should be made through the tissue covering the calculus. The knife should then be carefully withdrawn, and a slender scoop or curette introduced along the index finger of the left hand, still retained within the bladder, should be employed for gently turning the calculus out of its bed.

Mr. Morris urges that an exploration of the bladder should be made with the view of performing this operation on the ureter:

1. In hydronephrotic or pyonephrotic enlargement of the kidney, associated with bladder symptoms, with the hope of re-establishing the natural drainage through the ureter.

2. Before nephrectomy is resorted to for hydronephrotic or pyonephrotic tumors, which have been opened or tapped through the loin without benefit.

3. Before nephrectomy is resorted to in cases of suspected renal calculus, in which no renal tumor exists, and where, after digital exploration and puncture of the kidney through the loin, no stone is found.

4. In cases of sudden or rapid suppression of urine, or anuria, occurring after symptoms which have given rise to suspicion of stone in one or other kidney or both kidneys. A kidney which has undergone compensatory hypertrophy may become blocked by a calculus which has been forced by the superimposed urine to the lower end of the ureter, and which cannot pass the vesical orifice of the ureter. Such a kidney may be, probably is, the only one the patient has to depend on; and in this case death must ensue if the obstruction is not removed. If no stone can be felt through the bladder, life may yet be saved by giving a vent to the pent-up urine by lumbar nephrotomy.

ANÆSTHETICS, PRECAUTIONS IN THEIR USE.—Dr. George Eastes (*Brit. Med. Jour.* Nov. 20th, 1884) in a paper on this subject gives the following as a list of the precautions to be observed by one who administers anæsthetics:

1. The patient should have no meal (except in extreme cases of feebleness) for four hours beforehand, to avoid the tendency to vomiting. A little brandy or ammonia may be given with some water fifteen minutes be-

fore the operation, if the patient be an adult, and chloroform be selected.

2. The anæsthetist should endeavor to reassure the patient by a kind, gentle manner, which may calm an agitated heart and induce easy respiration.

3. No tight fitting garment or band should be left around the chest or abdomen.

4. All artificial teeth must be removed from the mouth.

5. The anæsthetist should examine the heart sounds and pulse before the operation. This precaution may seem superfluous in most cases, but in a few cases may put the administrator on guard.

6. The patient should be placed in the recumbent position with head slightly raised. This is particularly important when chloroform or other cardiac depressant is used.

7. The anæsthetic should be applied in the manner most suitable to the vapor used.

8. The surgeon should not commence his procedure before the patient is fully narcotised; not alone in severe operations, for many simple procedures, such as the reducing of dislocations and strangulated hernia, and the diagnosing of tumors of the abdomen and pelvis, require complete muscular relaxation for their successful attainment.

9. It is a golden rule never to give more of the anæsthetic than is necessary to produce sufficient anæsthesia for the operation required to be performed. Since every extra degree of anæsthesia is an advance along the road whose extreme goal is death, the patient should be taken no nearer the dreaded end than is quite requisite, as all the steps passed have to be retraced. Besides, as the gap separating the patient from death becomes lessened it may easily arise that in extreme narcosis, one extra and apparently trivial event, which in health would be quite inoperative to cause fatal issue, may determine the patient's career.

10. Lastly, as the work which the anæsthetist performs depends for its successful result upon such a number of nicely-balanced conditions, his whole attention, during the few moments of his employment, should be concentrated upon the case. He must watch the respirations, the pulse, the countenance, and the general condition of the patient. He should not be observing attentively the steps of the surgeon's procedure, otherwise he may fail to notice the first sign of danger in the patient, and the life, for which he is chiefly responsible, may be jeopardized before it is recognized that it is in peril.

COLOTOMY, WITH A COLLECTION OF 351 CASES.—A retrospect of the operation of colotomy is of marked interest; proposed and rejected, it was apparently forgotten; then revived and modified successively by several surgeons in its day; and, although over a century and a half has been consumed in its progress, it is even yet far from being in its true position amid the heroic measures of modern surgery. Such a retrospect appears in the October number of *The American Journal of the Medical Sciences* from the pen of Dr. Wilmer Ridgway Batt, of Phoenixville, Pa. A surgeon who subscribes to the doctrine that an artificial anus should not be made in the case of imperforate anus is no justified in doing so on any principle of morality, since upon him rests an imperative obligation to employ to the utmost of his ability the means placed at his command for the relief of human suffering and the prolongation of human life. When we likewise consider of what vast importance is the prolongation of life in a human adult, and how vast may be the concerns which hang upon such an event, we find the same imperative duty no less binding. To obviate death from over-distention of the bowels, which is one of the most painful and distressing terminations of life, colotomy will be justifiable under conditions of the greatest gravity; and may be indicated in any obstructive complication of the lower bowel which has passed beyond the power of local remedies, and in which a judicious trial of medical treatment has failed to afford relief. Mr. Phillips, of London, tells us that one case of intestinal obstruction occurs in every one hundred deaths, and from 139 cases of obstruction which he collected, in which surgical aid was not given, 133 proved fatal. The fact that such a terrible fatality as this should exist, and an operation affording the advantages of colotomy be unperformed, must ever be a shadow upon the honor of modern surgery. The technique of the operation is fully discussed, and elaborate statistics are presented which show most conclusively that the dangers of the operation are very few, and that the number of recoveries depend very greatly upon the nature of the affection for which it is performed.

A NEW METHOD OF CURING CROOKED NOSES.—Dr. J. B. Roberts (*N. Y. Med. Jour.* Oct. 8, 1884) describes a new plan for curing a crooked nose:

"A scalpel is introduced through the left

nostril of a nose whose end is bent to the right, and the cartilaginous septum perforated at its upper and back part and a long incision made through it in a direction downward and forward. This enabled him to push the whole cartilaginous portion of the nose to the left and overcome to a great extent the lateral deformity. To retain the parts in position he introduced a steel pin an inch and a quarter long into the right nostril and passed it completely through the anterior and upper segment of the divided septum near the columella. Having the moveable portion of the septum thus transfixed he is able by carrying the head of the pin to the left to move the anterior part of the nose to the left and retain it there by imbedding the point of the pin deeply in the immovable cartilaginous septum and mucous membrane at the back of the left naris. In short, he incised the deformed cartilage and pinned it in position very much as a flower is pinned in the button hole of a coat; To relieve the little deflection remaining at the end of the nose, he with a tenotome in the right nostril parted the cartilage loose without perforating the skin and pinned the parts over to the left by a second pin inserted from the cutaneous portion of the dorsum on the right of the median line. The point of this pin he fixed by imbedding its point in the tissues of the left naris. The head of this pin he covered with a small square of court plaster. The correction of the angular deformity of the septum removed most of the occlusion of the left nostril.

AN OBSCURE CASE OF POPLITEAL ANEURISM SIMULATING SARCOMA—The diagnosis of popliteal aneurism is not generally a matter of great difficulty, still some of the cases of aneurism simulate other diseases so closely that mistakes are occasionally made. Many able surgeons have opened aneurisms, supposing them to be abscesses, and others again have tied the femoral artery for malignant growths, mistaking them for aneurisms. There are not a few cases recorded where an old consolidated aneurism has been mistaken for a sarcomatous tumor. In the January issue of *The American Journal of the Medical Sciences*, Dr. Francis J. Shepherd, of Montreal, reports an obscure and instructive case of popliteal aneurism, which was under observation for several weeks, and in which there was a total absence of aneurismal symptoms, and the rational symptoms pointed to sarcoma, either of the periosteum, or the parts about an old popliteal aneurism, for which the patient

had been successfully treated some years before. Amputation was performed, and an examination of the tumor showed it to be solid throughout and composed of fibrin, solidified *en masse*. The orifice of the aneurism was at the distal end of the tumor, and the blood therefore flowed from below up, with, of course, a lessened stream; the circulation, owing to the obliteration of the femoral above the tumor, being carried on by collateral branches. As there was no cavity in the tumor the absence of pulsation and bruit is explained. As there was not a single symptom which pointed to aneurism, an accurate diagnosis seems to have been impossible.

RECTAL ETHERIZATION.—Dr. W. T. Bull (*Med. News*, Jan. 11th, 1885) says that he has had considerable experience with etherization by the rectum. He had administered ether in this manner in seventeen cases, and had reached the conclusion that the method should not be practiced, because in a large proportion of cases the reaction which followed, on the part of the intestinal tract was very considerable. In some cases there was diarrhoea, with bloody passages, and in others ordinary serous diarrhoea, and the diarrhoeal discharges seemed to occur without very much reference to the apparent good general condition of the patient. In one case the diarrhoea continued for two or three days after the operation. Judging from his own experience he was unable to call etherization by the rectum a safe procedure, and this conclusion had been confirmed by the occurrence of deaths in different hospitals from ether administered in this way, and when there was nothing in the operation which would have imperiled the life of the patient.

NASAL POLYPI, RICHARDSON'S TREATMENT.—Dr. Richardson (*The Asclepiad*) recommends sodium ethylate in the treatment of nasal polypi. The caustic agent is applied by means of cotton wool on the point of a probe or forceps. The saturated cotton is plunged into the substance of the polypus. On removing the cotton it usually happens that the patient can blow from the nares the entire polypoid mass. A second application should be made to destroy the base of the polypus. Its mode of action is given thus: In contact with the water of the polypus the ethylate is decomposed into caustic soda and alcohol; the latter coagulates the albuminoids and the former acts as a caustic. A burning pain is said to be the only after effect of this application.

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Original Communications.

A Clinical Study of Deep, Acute and Chronic Abscess of the Neck.*

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THERE are few subjects that we are called to treat that give us more anxiety than deep abscess of the neck; at least, such has been my experience. In no other region of the body attacked with like frequency is there so much suffering, so much distress, and so much danger that needs such prompt action for relief, as deep abscess of the neck. Many will agree with me, in the statement, that this subject has not received the attention it deserves.

Surgical text-books finish the subject in a few lines to a page or two, or say nothing about it. Bryant's excellent work does not refer to abscess of the neck, either in the index or text. This is very misleading to the young practitioner and dangerous to the patient. Both alike are ignorant of the danger that is staring them in the face. Little more can be said of periodical literature, with one exception, in late years, so far as my reading has extended, which has been considerable. The article I allude to is by John A. Lidell, of New York, in the *American Journal of the Medical Sciences*, October, 1883.

Abdominal section seems to have monopolized the skill of our prominent surgeons, and anything above the diaphragm or below the perineum is worthy of little or no consideration. If a patient has an abdominal section made, it is heralded through the journals, unless perhaps he die, as a great achievement. But the poor devil whose life is in jeopardy from a deep cervical abscess, suffering intense agony, as well as the surgeon who treats him, are unknown to fame. But, as country surgeons, we are more deeply interested in the latter than the former classes of cases, as we meet them much more frequently, and must treat them promptly ourselves, as they will not allow transferring to more skillful hands.

The dangers from abscess of the neck may

by constitutional or local, the latter, on account of the relation of important contiguous structures or organs. We have never seen an acute abscess but what the constitution was more or less seriously involved, either through diseases, such as scarlatina, typhoid fever, etc., or a broken down or irritated condition of the system. While we should keep this fully in mind, the greatest danger is from its locality—the structure in which the pus forms and the organs which are likely to be affected by it. Just remember that we have here the larynx, œsophagus, trachea, anterior mediastinum, lungs and large vessels of the neck, organs whose continuity must be preserved to carry on the process of life. The pus may take circuitous routes which are painful and tedious, undermining the constitution, if not actually proving fatal. Finally if the patient has escaped death by the pus attacking the different important organs, he may still die from exhaustion, pyæmia or septicæmia.

The great mischief producing element in this dangerous complaint is the deep fascia of the neck. While the tissues of the neck supplied with a cellular structure remarkable for its laxity, the deep fascia is just as remarkable for its strength and great firmness. It sets bounds which the pus cannot pass, hence it must burrow among the tissues of the neck, following the way of least resistance, inflicting irreparable damage or even involving the loss of the individual's life.

Case 1.—Scarlatina, followed by deep acute abscess of the neck, ending in death. F. W., æt. 7. This was a robust lad who took sick with scarlatina about the middle of December, 1869. He had rather a severe attack, it being accompanied with considerable sore-throat. At the end of three weeks he was considered well enough not to require my attendance any longer. In a week my services were again required. The mother thought he had taken cold. Two days previous he had a slight rigor, followed by fever, loss of appetite, furred tongue, confined bowels, and scanty secretion of urine. He also complained of pain in the throat and considerable difficulty in swallowing. The

* Read before the Medical Association of Northern, Mich.

general symptoms were found as above described, while the local conditions were about as follows: The right side of the neck was distinctly swollen, firmer to the touch than normal, and painful under slight pressure. The fauces were red, tonsils swollen, the right quite a little more than the left. The pulse was 120 and the temperature 102° . He was still around with his clothes on, but his playthings no longer interested him. A warm bath was given, after which he was put into a warm bed, and to still further promote diaphoresis, the following powder was given:

Quinine sulph., gr. xii
Pulv. Dovers, gr. xx.

M. To be made into 10 powders; one every two hours, unless Dover's brought on too much somnolence. Warm fomentations to the neck.

The following day the spirits of the child were a little more cheerful. He had sweat freely and had a pretty good night's rest. Has refused all food. The temperature is 102° , pulse 124. The swelling in right side of neck has increased a little, though it is not quite so tender to the touch. The faucial inflammation has not improved, while the right tonsil is now covered with purulent-like patches, which can be easily wiped away. Swallowing is very painful and difficult, while nothing but lemonade and medicine is taken. He was ordered the following prescription:

R Quinine sulph., gr. xx.

To be made into 12 powders; one every three hours. Also:

R Tr. Ferric chloride, 3 iij.
Potass. chlorat., 3 iss.
Glycerin, 3 j.
The juice of one large lemon.
Water sufficient to make 3 iv.

M. Sig. A teaspoonful once in three hours between powders,

Locally, flax-seed meal poultices were ordered. It would be too tedious to give a daily account of the condition of this interesting case, hence I will as rapidly as possible give his condition to the end. The general symptoms varied from day to day. The temperature ranged from 102° to 105° , and the pulse gradually went up to 130, 140, 150 and upwards. The lad looked sicker and more exhausted each succeeding day. was troubled with diarrhoea, tongue became dry, and sordes on the teeth.

The swelling in the neck gradually increased and became more painful. It extended from under the lower maxilla to within an inch of the clavicle, involving the whole

side of the neck. I made daily trials to detect fluctuation. About the tenth day the surface became red and a little shiny in the middle of the right side, and on the twelfth I detected fluctuation.

Everything had been done to foster our little patient's strength and relieve his distress. Although swallowing was painful and difficult, we managed to get down considerable stimulants and tonics, as well as iced milk, egg nogg, beef tea, etc.

As above stated, on the twelfth day after I first saw the case, I thought I detected fluctuation, but I persisted in conservative surgery for two days longer, until fluctuation was quite distinct, and my little patient nearly extinct. I now determined to let out the matter, and proceeded in the orthodox method, of making a puncture with a straight bistoury. Quite a quantity of foetid, greenish colored, thin purulent fluid escaped. After it had ceased to discharge of its own accord, much more was obtained by squeezing it out. A piece of lint was introduced into the wound to prevent it from closing.

In the course of 18 hours the lint was removed, when a considerable quantity of pus flowed out, but much more offensive than the day before. A solution of permanganate of potash was used to wash out the neck, which did good service in correcting the odor. The evacuation of the pus gave the patient considerable relief for a day or two. He could swallow much better and consequently took nourishment more freely. Suppuration became more profuse every day for six days, and, in spite of the permanganate, became more and more offensive. The neck was reduced in size very much, the skin became loose and flabby, feeling as though it was undermined. The puncture and skin for a couple of inches around it, turned of a dark-purple color. At the end of six days after the puncture, the suppuration suddenly diminished, but became extremely offensive and of a dark color. The general symptoms became worse and worse, until on the tenth day after the opening of the abscess, the 24th of its course, the lad succumbed.

I do not revert to this case with any pleasure, especially in the present light of surgery. It was my first case and it made a powerful and lasting impression on me. There is no question but that the system was in a low, degraded and poisoned condition, ready to take on inflammation of a serious character, whose progress would be serious, if not fatal. But, on the other hand, it was also just such

a case where septic life, having once gained entrance into a wound or abscess, would breed rapidly, producing destruction to the economy. It is unjust such a case where the surgical procedure followed here is most to be condemned. This was a constitution lowered in its vitality, making it an easy prey to bacterial life; and the only hope there was to this patient, or that there is to any similar one, is to open early and keep the cavity of the abscess aseptic. I have no regrets, except that surgical science had not developed a better and more thorough plan of managing such cases.

Lister's discovery was unknown, and bacterial life destroyed the human family without let or hindrance.

Case 2.—John W. 1883. Age 28. American. (For the history of this patient, up to the time he was brought to me, I am indebted to Dr. Silsby, Shiloh, Mich.) About two and one-half weeks before I saw him the patient was exposed to cold, which was followed, the next day, by a general bad feeling, and the day following he was taken with rigors, aching in the bones and muscles. The rigors were followed by fever, thirst, pain in the back, pain in the throat, and pain and difficulty on swallowing. The fever increased, the throat began to swell, swallowing became very difficult and painful, when the patient sent for Dr. Silsby. The latter found the patient as above described, and in addition found the tonsils very much swollen, considerable swelling under the lower maxilla. Treatment was given to meet the indications, but to no purpose.

The fever continued, the general discomfort increased, swallowing became more difficult and painful until deglutition became impossible. The motion of the lower jaw became much limited, so much so that the finger could no longer be introduced between the teeth; the swelling under the lower maxilla increased till it had swollen out even in front and on both sides. Respiration was gradually interfered with, and the two nights previous to my seeing him it was so extremely difficult, that the patient thought several times that he "must choke to death."

The condition when I saw the patient was about as described above, by Dr. Silsby. He was a rather smallish man, well built, looking as though he had a good tough constitution.

He looked pale and haggard, pulse 120, small and easily compressed. Bowels had been confined for two days. The tongue could not be seen, as it could not be protruded.

The neck was swollen even with the lower maxilla, and the swelling extended half way down its entire length. There was no distinct tumefaction, but it was even and uniform, hard and painful under pressure. By standing sideways to the patient, there could be seen a prominence between the symphysis menti and the body of the hyoid bone. Fluctuation could not be detected anywhere. I now tried to get my finger into the mouth and succeeded after a long time in introducing my little finger. The dorsum of the tongue was tightly pressed against the roof of the mouth. The whole floor of the mouth was filled up, hard and very painful to pressure. I tried hard to get fluctuation, but failed. However, I became satisfied that there was pus under the floor of the mouth. I passed the needle of a hypodermic syringe in the median line about half way between the symphysis menti and the body of the hyoid bone, backwards and a little upwards, and after sinking it $1\frac{1}{4}$ inch I drew pus into the cylinder of the syringe. It was late in the night and we delayed any further operative procedure. Next morning the patient was anesthetized, and I proceeded to find my way to the abscess. An incision about an inch and one-quarter long was made in the median line, commencing under the symphysis and extending downwards.

The tissues were successfully divided and the pus was only reached when we had carried our incision through the fibres of the genio-hyoglossus. When the pus cavity was laid open, the contents came out with great force, spurting several feet. The pus was of a dirty-green color, and offensive.

The cavity of the abscess was thoroughly washed out, somewhat after the method of the late Mr. Callender, and a drain inserted. The wound was dressed with antiseptic oakum.

The patient, after coming out of the anæsthetic, expressed great relief, and made a rapid recovery. Dr. S. informs me that the opening closed before the abscess had healed and he had to reopen it, after which it never troubled him again.

Case 3.—C. M. S., aged 23, 1883; native. Parents are strong, healthy people. Has always enjoyed good health; no syphilitic taint. About a year ago was caught between two box cars and terribly squeezed. Extensive ecchymoses in the neck, trunk and thighs followed. He expectorated blood for a number of days. After three or four months of confinement, he was able to get around

some, and in two months more went to work again as fireman on a locomotive. About the time he left the house he noticed a small lump in the neck on the right side. This gradually increased up to the time he consulted me. Some eight or ten physicians and surgeons had seen it, all pronouncing it a solid tumor, and all recommending excision.

Present condition.—The young man is to all appearances perfectly healthy and feeling as well as he ever did. On the right side of his neck, about midway and behind and under the sterno-cleido-mastoid muscle there is a tumor as large or larger than a big goose egg. It is ovoid in shape and apparently smooth. The skin covering it is normal. On palpation there is a perfectly smooth surface, and the tumor is freely movable. I had already told the young man the doctors who had examined it were correct in their diagnosis; that it was a solid tumor. I then picked it up, as it were, grasping it between my fingers and thumb, and by pressing it firmly I thought there was a certain amount of resiliency which I would not expect to find in a solid tumor. As a last resort in the diagnosis I plunged the needle of a hypodermic syringe into it and to my surprise sucked it full of a cream-like fluid. I withdrew the needle, when a little of the pus oozed out of the wound. I appointed the next day for opening the abscess. When I arrived at his home, I learned that he had a severe chill during the night, followed by high fever, which was still on him. The neck was very much swollen, from the lower maxilla down to the clavicle. All the tissues of the right side of the neck seemed to be involved in one mass of phlegmonous inflammation. There was much pain and great difficulty in swallowing, and some considerable difficulty in breathing. I made a puncture into the abscess with a straight bistoury, let out considerable pus, washed out the cavity with carbolic water, 1-32, and introduced a drain tube. I was well satisfied that I hadn't cleaned out the pyogenic sac, but I was afraid to make a large incision on account of hemorrhage. I left my patient, full of fear for his welfare, but trusted to kind Providence to help him out.

Oct. 13.—Patient looks very ill. The pulse is 126 and the temperature 105°. The face is suffused, and on the right side it is of a deep red. The right side of the neck is enormously swollen, red, hard as a stone, and very tender to the lightest touch. Swallowing is almost impossible; only liquids are attempted, much

of which regurgitates through the nose. Respiration has become very difficult, and the patient can not lie down on account of its making breathing impossible.

Five grains each of quinine and Dover's powder were ordered once in three hours, frequent sponging with water and vinegar and a poultice to the neck. There is very little discharge from the wound. The tube was taken out and left out.

On the 15th, the temperature was 103½ and the pulse 130, small and easily compressed. Cannot swallow anything, and respiration more difficult. The lips looked cyanosed, and I made all preparations to open the wind-pipe should the interference grow any worse. The swelling was about the same, and there was a small amount of thin bloody fluid issuing from the wound. The patient thought the medicine still went down, though nothing else would.

Oct. 16.—The patient is decidedly improved. The general condition is better, fever has abated, temperature 102°, and the pulse is down to 110. The swelling has also gone down. No discharge from the wound, which is closing up. Quinine and phosphoric acid were prescribed. The poultices were discontinued, only flannel and cotton batting applied to the neck.

Oct. 19. The patient is up; no more fever; pulse 80. The inflammatory swelling has nearly all disappeared, leaving the original tumor as large and of about the same shape as before.

On the 25th of October the patient was put under ether by Dr. S. V. Roring. I now made an incision 1¼ to 1½ inches long over the most prominent part of the tumor and just behind the sterno-cleido-mastoid muscle. I divided all but the skin on the grooved director. After going through the deep fascia we came directly on to the pyogenic sack, which was laid open for at least an inch and a half. Several ounces of pus escaped. With the index finger of the right hand I explored the cavity and succeeded in bringing out several large pieces of cheesy-like masses.

The sac was thoroughly cleansed with carbolic water, 1-20, and a large piece of aseptic oakum introduced into the wound and sac. The wound was dressed with antiseptic dressings—and right here let me say that all antiseptic precautions were observed, except that the spray was not used.

Nov. 26.—The patient has had very little pain. Has no fever, has a good appetite and is very cheerful.

Dressings were left in situ. Allowed to sit up. On the fourth day the dressings had soiled through, when they were changed.

The patient made a good recovery so far as the pyocystic tumor was concerned.

Case 3.—A. G., aged 13, took a severe cold the fore part of April, 1873. He was taken with sore throat and fever, and went to his bed on the fourth day. A physician was called in who found the lad suffering from high fever, quick pulse, great pain on swallowing, the left side of the neck very much swollen, red, and tender to the touch.

The patient gradually grew worse; the phlegmon in the neck increased. On the fourteenth day, distinct fluctuation having developed, the orthodox puncture was made. Much pus escaped at the time of puncture, and considerable the two succeeding days. Two days following the puncture dark blood was seen to issue from the wound. The patient grew rapidly worse and died in half an hour, before a physician could reach him. No post mortem was allowed. The sac of the abscess was much distended and the blood which issued from the opening must have been five or six ounces. It is not hard to guess what killed this patient, viz., erosion of the internal jugular vein. This case, although I saw it after death, made another lasting impression on me. This patient, so I learned, was considered in no kind of danger thirty minutes before he was a corpse.

Case 4.—J. S., an inmate of the State House of Correction and Reformatory at Ionia. The prison physician, Dr. E—, asked me in the spring of '82 if I would not assist him in removing a fatty tumor from the side and back of J. S.'s neck. I readily assented and the day was fixed. On my arrival the doctor asked me to confirm his diagnosis, which I did not do: The hypodermic syringe was used, which proved the tumor to be a cold abscess. It was punctured and washed out with carbolated water 1-20, and a drain tube inserted. We had no dressing but common oakum. Severe inflammation followed with much febrile reaction and all its concomitants. The patient was sick for four weeks. The abscess closed permanently in about six weeks.

Case 5.—Miss H., of an adjoining county, called with her father to consult me about herself, when she gave the following history: During the last days of the month of March, of 1884, she began to feel out of sorts, and in two days following she was taken with a chill. A high fever followed with soreness in the

neck and throat, and difficulty in swallowing. She said the difficulty in swallowing did not seem to be in the throat, but more in the mouth, and seemed to be more on account of the pain produced when she used her tongue. The neck under the maxilla, mostly in front, swelled up and became painful; deglutition became extremely difficult and painful, and respiration oppressive. The family physician attended her for nearly three weeks, giving febrifuges and applying poultices. She says she suffered extremely during this time. At the end of three weeks there appeared a soft spot about an inch below the symphysis of the inferior maxilla. A small quantity of pus escaped and gave the patient some relief. But the swelling was not reduced much, although the symptoms, general and local, soon ameliorated quite a little. In five or six days the puncture closed entirely. She was able to be up part of the time. After being in this condition for a few days, she had another chill followed by nearly the same train of symptoms, general and local, as after the first chill. In about two weeks the cicatrix of the old puncture opened and about two or three drachms of pus escaped. She was confined to her bed about a month. When she got so she could ride on the cars she started to consult me.

Present Condition.—This young lady is of medium height, rather heavy set and her usual weight is about 160 pounds. From her general appearance I should call her a strumous subject. Her face is pale and denotes suffering. She can scarcely talk owing to the pain that is produced by the movements of her tongue. She has a temperature of 101° F., and her pulse is 104. The neck under the lower jaw is very much swollen clear back to angles. This swelling is hard and painful on moderate pressure. About midway between the symphysis of the lower jaw and body of the hyoid, around the cicatrix of the old puncture, there is a small space where the skin is red and raised. The mouth was opened, after a few trials, wide enough to admit my finger. The tongue was much elevated, as was also the floor of the mouth; pressure on either one produced excruciating pain. A bistory was passed in the place of the old cicatrix backwards and a little upwards for an inch and one-quarter. I withdrew it after having reached pus, enlarging the opening so as to give the pus free exit. The abscess was washed out with a corrosive solution (1-1000), an oakum tent introduced and oakum dressing applied.

About two ounces of pus escaped. The patient went home and next day had a slight chill, followed by fever. This lasted for several days, when the general and local condition gradually improved until she was completely restored to health.

Case 6.—*Retro-pharyngeal abscess, connected with caries of the third cervical; recovery.*

In February, 1882, I was called to see Miss W—, aged 24, native, resided nine miles in the country. Parents strong and healthy. The patient had good health up to eight years ago, and was large and strong for her age. Eight years ago she contracted scarlatina, of which she had a severe attack. She finally recovered from the acute attack, but with shattered health and a discharge from both ears. This ceased in the left ear about 18 months ago, but has continued in the right to the present time. Hearing has become almost nil in both ears, being compelled to use the dentiphone to carry on conversation. Since about a year ago there has developed a pain in the right external meatus region of the mastoid, and from there extended toward the base of the skull and cervical region. This has grown in severity until now, at times being very excruciating.

For the last two or three months, the least jar while walking or riding has given her severe pain in the upper cervical region; on account of which riding has been given up entirely, while walking is performed with extreme caution. Movements of the head have been painful for three months, and now she carries the head fixed. For the last two months deglutition has become painful and there has been a constant discharge of a thick ropy mucus from the pharynx, which she hawks up every few minutes. The discharge from the right ear has become very offensive. Her general health has grown from bad to worse. She has gradually wasted away until she and her friends think she has lost at least one-fourth of her weight.

Present condition.—This case has many points of interest, such as mastoid disease, for which we had to resort to operative procedures; caries of the second or third or both vertebræ, but these must be excluded here on account of the space a detailed account would occupy. Suffice it to say that the patient entirely recovered from caries in the vertebræ and mastoid process. While examining the case there was noticed quite an enlargement of the right side of the neck. It was a diffuse, uniform enlargement, extending from below the mastoid process to

within two or two and one-half inches of the clavicle, in front and under the sterno-cleido-mastoid muscle. The speech was peculiar, thick and muffled.* On opening the mouth to see what caused the difficulty in swallowing, I was immediately struck with the anterior displacement of the pharyngeal wall. I now passed my finger into the throat and succeeded in getting fluctuation in the posterior pharyngeal wall. I passed the aspirating needle into the abscess and succeeded in obtaining nearly four ounces of thick pus. This afforded our patient much relief, and she talked much better immediately. To our surprise, the swelling in the neck was gone. At the end of two weeks the throat had filled again, and the swelling in the neck reappeared. It was again aspirated, with like immediate results, but, fortunately, this time with permanent relief. The post-pharyngeal abscess was, no doubt, from the vertebral caries.

With Sayre's jacket and jury-mast, tonics and a generous diet our patient recovered completely.

I will now take the liberty to make some quotations from the article already referred to, by John A. Lidell.

"Case 7.—Private Albert J., aged 18 years, belonging to the Signal Corps, was admitted into Stanton Hospital May 21, 1864, with gonorrhœa; health otherwise apparently good; he had neither sores or swellings on any part of his person.

Ordered magn. sulph., $\frac{3}{4}$ j., to be followed by the following mixture: \mathcal{R} . Copaib. balsami, spts. eth. nitr., $\text{ää } \frac{3}{4}$ j.; liq. potass, $\frac{3}{4}$ ij.; spts. lav. co., $\frac{3}{4}$ ij.; syrup acac., $\frac{3}{4}$ vj. M. Sig. One tablespoonful three times per day. Wash frequently the parts in cold water; low diet and rest.

28th. Renew the gonorrhœa mixture; also \mathcal{R} . Zinc. sulph., gr. viij; aquæ, $\frac{3}{4}$ iv. M. S. Use this as an injection twice or three times a day. The discharge has ceased, but the medication is to be continued for better security. He was reported for duty, left the hospital, but re-entered on June 22, complaining of a sore throat. Upon examination I found him free from gonorrhœa, and with nothing to indicate a syphilitic taint. He is perfectly free from sores and swellings of every kind, whether glandular or otherwise, except a general inflamed condition of the fauces, tonsils, etc.; has a cough, fever, and some difficulty in respiration; has had a chill; complains of no pain. \mathcal{R} . Quin. sulph., gr.

*As if she were holding a hot potato in her mouth.

6, three times per day; a seidlitz powder once an hour till it operates freely; apply ice to the throat and use for a gargle: \mathcal{R} Arg. nitrat., gr. viii; aquæ, \mathfrak{z} iii; syrup. simpl., \mathfrak{z} j. M. Three times per day.

23. Continue the quin. with ice to throat.

24. General condition better; chills have stopped; throat, however, continues sore; cough, supposed to result from faucial irritation, still troublesome. Continue quinine with gargle, with ice to throat.

26. The left tonsil has become ulcerated. Excepting difficulty of deglutition, the patient appears better. He says he would eat if he could swallow. Touched the tonsillar ulcers with caustic (arg. nitr.) Ordered: \mathcal{R} Potass. chlorat., \mathfrak{z} ss; syr. simplicis, \mathfrak{z} j; aquæ, \mathfrak{z} iij. M. Ft. gargarisma, to be used three or four times a day. Also: Magn. sulph., \mathfrak{z} ss to be repeated if the bowels do not move in three hours. His food to consist of animal broths or soups, milk, soft boiled eggs, custards, or any nourishing fluid food he will or can swallow.

July 1. The patient's general condition is fair, with the exception of sloughing about the tonsils, and parts adjacent thereto. \mathcal{R} Potass. nitrat., \mathfrak{z} ss; ol. oliv., \mathfrak{z} ij; sacch. alb., \mathfrak{z} i. M. Tere in mortario. Ordered the ulcerated throat to be mopped out with this mixture; also the chlorate of potass. gargle and the special diet to be continued.

6. Patient decidedly better. Faucial ulcers nearly all healed, and he has more appetite. Same treatment to be continued.

10. Patient not so well. He complains of heat and pain in the region of the larynx, but the ulcers have healed over as far down as can be seen. Ordered six dry cups to be put upon the upper part of his chest, to be followed by a sinapism on his breast.

11. Patient entirely relieved of his pain and difficulty of breathing by the cups and mustard plaster, and he is doing well.

17th. He has some diarrhœa. \mathcal{R} Mistura contra diarrhœam hospitalis. Signa. Take one teaspoonful after each stool.

18th. The diarrhœa is checked and he feels tolerably well.

20th. Bowels again loose, but it does not amount to diarrhœa. Ordered the diarrhœa mixture to be repeated.

21. All medicine was stopped, and a full diet of whatever he could swallow allowed.

23d. Patient appears to be doing well generally, but he complains of a feeling of soreness in the left side of the throat, which is

also slightly swollen. Ordered the painful and swollen parts of the throat to be painted with tr. of iodine, and as nourishing diet as he could swallow to be continued.

24th. Says he feels better. Same treatment continued; but he died suddenly in the afternoon of this day from asphyxia, caused by spasm of the glottis.

Autopsy twenty-four hours after death. The ulceration of the fauces had entirely healed. There was some extra redness of the larynx, but just beneath the left sternocleido-mastoid muscle, in a line with the thyroid cartilage, there was an abscess, about the size of an egg, filled with a thick yellow pus, which had burrowed down to about $1\frac{1}{2}$ inches below the omo-hyoid muscle. There was also extensive hepatization of the lower lobe of the left lung, and middle lobe of the right lung. The rest of the viscera, as far as examined, were normal.

Dr. Lidell gives a case of his own, where there was extensive suppuration, inflaming the pharynx, larynx, and trachea, where the pus made its way into the pharynx. The case ended fatally by asphyxia produced by œdema glottidis.

The pus, from abscess in the neck, has made its way into the pleural cavity, producing right pyo-pneumo-thorax, with general emphysema. Cullenden gives one case where the pus found its way from the neck into the anterior mediastinal space, and another where the pus surrounded the trachea and found its way to the roots of the lungs. The case reported in *Wuertemb. Corresp. Blatt*, and cited by Holmes' System of Surgery, is one of more than ordinary interest. I will take the liberty to give it in as few words as possible.

A powerful young man of 15 experienced pain and swelling in right parotid region. Tonsils normal; no fever. On 16th day hæmorrhage from mouth and nose. On 18th day swelling opened spontaneously, discharging a quantity of wine-less-colored pus; but swelling was still visible behind soft palate. After some hours about a pint of bright red blood suddenly issued from his mouth and nose. Four days later another hæmorrhage from mouth alone. Following day a still severer hæmorrhage from nostrils. The external swelling became larger and more painful. In the fourth week the retro-pharyngeal abscess burst a second time under precisely similar circumstances, and gave ease to the patient. The internal swelling pushed the uvula forward, but as this swelling abated,

the external one was correspondingly diminished. The patient died suddenly one night from hæmorrhage, after an interval of fourteen days.

Autopsy: A carious piece of bone was found in the anterior surface of the body of the atlas. There was an abscess cavity between the right tonsil and parotid gland, about the branches of the carotid artery the size of a hen's egg. It was filled with blood. The source of blood was not made out. Two small openings through the wall of the abscess into the mouth were found.

Time will not permit to give further illustrations of the great importance of abscesses of the neck; but I hope enough has been said to remove all scepticism as regards the extreme danger, and the necessity of prompt and thorough action on the part of the attending surgeon.

I need not state what the prognosis is in this class of cases, as the reader will already have surmised *that* by what has been said, and the cases reported. In the acute variety it is all-important that we make our diagnosis early and correct. The sooner pus is evacuated after it has begun to form the better, and consequently here, more than in the great majority of cases of purulent collections, is it necessary to diagnosticate the case as early as possible. The important question is, shall we wait for the usual pathognomonic sign, viz.: *fluctuation*? This, under ordinary circumstances, is essential before any operative procedure is undertaken. But this will not do in deep abscess of the neck. As soon as the general and local symptoms indicate that pus is forming under the deep fascia, and especially if there is any difficulty in breathing, the parts should be explored with a small aspirating or hypodermic needle, to see if pus can be found, and as soon as found, it should have free vent. The diagnostic aid which one may derive from the hypodermic needle in *chronic* abscess of the neck has already been demonstrated in two of the cases given.

Treatment.—The general treatment must vary according to circumstances; no one would treat case 1st and 2d alike—the one with the vital functions, the dynamic forces all at the lowest, with the blood floating full of poison germs, living on what the tissues should have; the other, in apparent robust health, at least able to eat his daily rations, and do full day's labor. In the first case it would be superfluity to tell you to do anything except what will stimulate and tone up the vital powers. Increase every function to

its fullest capacity. Where there is a sharp febrile movement, bounding pulse, etc., with local conditions, also, indicating strong inflammatory action, anti-thermic and anti-pyretic may be strongly indicated, and do great benefit.

The abstraction of blood from the seat of the inflammation, or even from the general system in well-selected cases, may become the means of preventing the formation of pus. This recommendation almost scares me and puts me in fear that charges of heresy will be brought against me; but I shall make an effort to postpone the trial till the fashion changes.

If the object be to prevent suppuration, we must act promptly, and we have no remedy that will act so quickly as abstraction of blood. Moreover, I see no reasonable objection (in suitable cases), as the disease does not lead to death by asthenia. It relieves the over-distended capillaries and their paralyses. Arterial sedatives may also do good work in this way. The most efficient local application after abstraction of blood is the ice-bag. It must be constantly applied and keep the parts short of freezing them. It will do more to prevent suppuration from taking place and to limit its area after it has taken place than any remedy I know of. As soon as matter has formed it must be evacuated. And here I must again, at the risk of tedious repetition, urge that we come to an early knowledge of the existence of pus, and prompt action in evacuating it. As we cannot afford to wait for fluctuation we must resort to means which will give us earlier intelligence. This we have in the aspirator, or the hypodermic syringe.

As soon as there is any difficulty of swallowing if there is no other indication, diligent search should be made for it with the aspirator.

Now comes the important question, viz., How should it be evacuated? As stated, most authors recommend a puncture; some to make the puncture and enlarge the wound some as the bistoury is withdrawn. This recommendation I hold to be unscientific and pernicious.

I will describe the procedure in case No. 3 which will give the idea I wish to convey. After the patient was completely anesthetized I made an incision corresponding with the outer border, and parallel with the sternocleidomastoideus muscle, about $1\frac{1}{2}$ inches long. I first divided the skin and platysma myoides, then the superficial fascia and last the

deep fascia. I did not succeed in reaching the matter. I then took a stout grooved director and tore my way through the sac into the pus cavity. I made the opening into the sac nearly as large as that in the skin. The cavity was thoroughly syringed out, but this did not clean it. Reaching inside with my finger I discovered cheesy masses, which I brought out. After being cleansed, and properly aseptized, a drain was put in and antiseptic dressings applied. The operation should be made with deliberation from the outside, dividing the various tissues one after another freely. It should be seen that the pus is *all* evacuated, the sac made aseptic and retained so until all danger of septic infection is gone by.

In cases where there is much difficulty and pus cannot be found, an incision should be made down through the deep fascia. This has been followed by excellent results. In quite a number of cases, although matter was not found at the time of the operation, in a few hours pus made its way to the opening in the deep fascia and relieved the patient from the distress and threatening danger.

At any time when respiration becomes extremely difficult where it is or cannot be relieved by an operation, the trachea should be opened without delay.

I would like to say more on this important subject, but I feel that our time is pressing when we only take one day to perform the many duties that come before this society. Remember this: that in deep abscess of the neck three things are essential, an early diagnosis, free incision, and antiseptic treatment.

The Bacillary Origin of Tuberculosis Experimentally Proved.*

BY PROF. GERMAIN SEÉ, PHYSICIAN TO THE HOTEL DIEU, PARIS, FRANCE.

The true, direct, efficacious causation of the tuberculous processes is summed up in one word: *the bacillus*.

1. *Experimental causation*.—We have to prove the causal relation by experimentation; by producing experimental bacillo-tuberculosis.

2. *Clinical causation*.—Next in order comes clinical causation. Under this head we have to consider all external circumstances which favor the entrance of the bacillus into the organism, whether by the atmosphere or by the ingesta.

3. *Vital causation*.—We have next to determine the vital conditions which preside over the transmission of the bacillus from one individual to another by contagion or by heredity.

4. *Pathological causation*.—The preparatory pathological conditions will form a special chapter.

5. *The physiological states* will constitute the last paragraph pertaining to the great laws of causalities.

I. EXPERIMENTAL CAUSATION.

Three kinds of Experimental Phthisis:—

Histology leaves unanswered the question of the nature of tubercle, and is unable either to establish the precise characteristics of the peri-tubercular exudation formations, or to distinguish true tubercle from those common inflammatory products that are called to-day pseudo-nodules.

We require the intervention of experimental pathology to put an end to these unprofitable discussions as to the relations of tubercle to the phlegmasias.

Experimental pathology has taught us positively that the peri-tubercular inflammations are of the same province and nature as phthisis. It proves besides that the tubercle nodule, despite its striking resemblance to false tubercle, presents a property inalienable and at the same time characteristic, namely its transmissibility, its inoculability after two or three generations of successive cultures. How has experimental pathology succeeded in arriving at these decisive results? It has quite simply reproduced the disease in its entirety and under all its forms. To accomplish this end, all that has been necessary has been to introduce into the organisms of the higher animals by their different ways of absorption, tuberculous matter, or rather the parasite which gives it its virulence.

The procedures of experimentation consist simply in effecting penetration of the tuberculous substance: 1. By the insertion of virus under the skin, in the serous cavities, in the anterior chamber of the eye. 2. By compelling the ingestion by animals under experimentation, of the tuberculous tissues or secreted products of phthisical men or animals. Among those alimentary substances that which interests us the most is the milk of tuberculous cows, or of such as are affected with bovine phthisis. 3. The third method of experimental absorption consists in making the brute subjects of experimentation respire

*An advance chapter of a forthcoming book.

the air contaminated and exhaled by phthisical patients, or, better still, air which has been impregnated with tuberculous products, such as dried and pulverized sputum. The subject of artificial alimentary and respiratory tuberculosis will find its proper place in chapters devoted to natural tuberculosis of the digestive and respiratory tracts. We shall now consider, as first in importance, inoculated tuberculosis, which is thus far purely experimental, the facts of tuberculosis contracted by inoculation not having been demonstrated in man.

Inoculated tuberculosis. Tuberculosis was produced by inoculation twenty years ago by Villemin. It is to him that belongs, notwithstanding several very imperfect previous essays, the glory of having succeeded by way of inoculation in engendering this disease in animals, in thus showing the whole morbid process and in proving its specific character and its virulence.

Conditions of experimentation.—Several conditions are indispensable for the operation, and it is because these have been overlooked or neglected that experiments have so long ended in disappointment, and in failure.

1. The inoculable materials ought to be not only tuberculous but bacilliferous and free from all septic microphytes.

2. The animal under experimentation must not be refractory to tuberculosis.

3. The inoculation ought to be practised in organs and tissues which are not too prone to take on inflammation.

1. *Bacilliferous substances.*—There has been much discussion as to whether miliary granulation substance is to be preferred or yellow tubercle, or caseous matter, or that from the so called caseous pneumonia which was at first supposed to be inefficacious. Success was obtained with these divers products, which are all phthisiogenous because they all contain the bacillus; without this agent, which is the virulence itself, every attempt at inoculation will be in vain; and this is the reason why one can just as well inject the so-called scrofulous matter of bones, of glands, tubercle of the genital organs, etc.; it is for this reason, moreover, that it suffices to know what are the bacilliferous tissues or liquids in order to utilize them for inoculation. Now it has been demonstrated that the bacillus occupies in tubercles, of whatever local or general origin, parts in process of softening, and in the nodules themselves, the central part of the neoplasm—the giant cells. Among the liquids you can

never depend on the blood, the urine, or other of the ordinary excreta; it is the pathological secretion of the mucous membranes, the muco-pus of the products of expectoration, which possesses the maximum of virulence.

Fresh bacilliferous materials.—With the exception of sputa, which preserve their virulence for months, the materials of which choice is made ought to be fresh; therefore, the tuberculous debris of the human subject cannot be relied on, on account of the tardiness with which the autopsy is generally made, and only the fresh sputa are suitable. Animals naturally tuberculous, or artificially rendered such, are not fit to furnish the inoculable material, unless they have just been killed.

Putrid matters give rise either to putrid septicæmia, or produce nothing at all. These precautions, which Villemin recommended years ago, without being able to give a reason for them, have now their explanation and justification in considerations drawn from the biology of the microphytes. We have acquired two important facts: in contact with materials undergoing putrefaction the bacillary microbes often lose their virulence, and this explains the want of success of inoculation with mixed materials; on the other hand, injections of putrid matters kill the animal by septicæmia, and thus fail of producing tuberculosis.

II. *Animals susceptible or refractory to tuberculosis.*

The choice of animals for experimentation is also a matter of considerable importance.

It is well known to-day what are the animals which habitually acquire phthisis and die from it, and what are those that are refractory. The guinea pig easily takes the infection, and is an excellent subject for inoculation. The hare is the predestined victim of bacillosis contracted spontaneously by contagion, or communicated by the physiologist; it has even been alleged that this animal may be made to contract phthisis at pleasure (*i. e.*, by simple exposure, even under good hygienic conditions), but this is probably a mistake.

Lebert has never noted spontaneous tuberculosis in this animal so prone to acquire the disease by contagion, and Raymond, out of three hundred necropsies of Parisian hares, found many cases of verminous cysts, but only five of tubercle. As for dogs, which are rarely tuberculous, inoculations have nevertheless succeeded in the hands of Bollinger and Klebs. The cat, as little phthisical as

the dog, has been treated with success by Chaureau, and Toussaint. In fine, if, after the example of Krishaber, and Dieulafoi, you choose the animal whose physiological and morbid constitution approaches the nearest to ours, *i. e.*, the monkey, you have no difficulty in tuberculizing it, even when the animal is in the most perfect state of health.

DEVELOPMENT OF INOCULATED TUBERCULOSIS.

I. *Tuberculizing results of inoculations.*—

The inoculation is performed in the subcutaneous cellular tissues, in the peritoneum, or in the anterior chamber of the eye. The latter is the favorite and the best location. Inoculation is effected by means of a fine bistoury or lancet, charged with a minute, almost microscopic, fragment of tubercle, or by means of a Pravaz syringe, filled with a dilution of tuberculous matter, or sputum.

These are the sequels that are observed, and these data apply equally to the peritoneum, where the infection is always produced the most rapidly.

Local tuberculosis.—Several days after the operation there is produced, at the point of inoculation, a slight swelling which does not affect at all the general health.

General tuberculosis.—Then, at the end of a variable time, the animal becomes enfeebled, falls into marasmus, and succumbs, often after a colliquative diarrhoea, like that of phthisis. At the necropsy there is observed, in addition to the local tubercle already become cancerous, little miliary granulations around the point of inoculation, tuberculous engorgement of the glands, and granulations more or less caseified in the lungs, intestine, liver, kidneys, and peritoneum; this is general tuberculosis.

Inoculability of artificial tubercles.—Tuberculosis thus produced is undoubtedly the true, the bacillary kind, for it may easily be inoculated in animals of the same or of different species, and with the greatest certainty for a succession of generations.

II. *Counter-proofs and objections.*—Critics have denied to this experimentation, its veritable character; they have alleged in objection, the ordinary, or indifferent nature of these products, saying that we have to do here with simple inflammatory nodules, but whose mode of production has nothing specific about it.

Effects of inert substances.—In fact, instead of tuberculous or caseous matter, experimenters have introduced, for purposes of compar-

ison, inert bodies, such as lint, blotting paper, débris of cancer into the peritoneum. They have injected into the veins pus from an abscess, or lycopodium powder, and in every case have obtained, besides the local granulations, general tubercloid alterations.

The subcutaneous insertion has produced the same effects. By introducing an irritating liquid, like croton oil, or some irritant powder, into the cellular tissue, they have seen produced an anatomical process of the same kind as tubercle; you may even see the liquid injected (provided it be of the nature of a pigment) in the giant cells, which develop in the inflammatory nodules (vide Emile Marchand, in Virchow's Archives, 1883.)

According to this view, then, tubercle does not act as a virus, but only as an ordinary irritant, and the neoplasm that results from it by inoculation resembles all the tubercloid products which are obtained by irritant foreign bodies. From an anatomical point of view this is indisputable, but when you come to consider the pathological properties of these morbid productions, you find an important difference.

Specific effects of tuberculous substances.—

Ingenious experiments of Toussaint, and especially of H. Martin, have definitely cleared away the difficulty. "Tuberculous matter," says this skillful physiologist, "determine, after incubation, the formation of a local tubercle to which succeeds a general tuberculosis." On the contrary, if you inoculate material extracted from the nodules which result from the injection of foreign bodies, it never gives rise to a general tuberculosis; it loses, even after the second generation in the series, the property of determining a local inflammation. It is then the series of inoculabilities which characterizes the true tubercle; its specific character is thus demonstrated, despite its anatomical similarity to the products of ordinary irritation. The fact that the tubercular nodules present the characteristics of an inflammatory lesion is of little consequence, for they have their pathognomonic properties both from the point of view of origin, and of serial reproduction.

Tuberculosis by inoculation in the eye.—We have here an irrefutable mode of demonstration, for one can follow step by step all the effects of the tubercle bacillus on the different tissues of the eye.

It was Cohnheim who first conceived the ingenious idea of introducing tuberculous matter in the anterior chamber of the eye. The

recent published experiments of Baumgarten entitled: "A Demonstration by Histology of the Pathogenic Value of the Tubercle Bacilli," leave no longer any doubt respecting the invasion of the virus: the progressive march of the bacilli in the media of the eye; you there almost see the bacillus in his insidious operations. You introduce the tuberculous substance in the anterior chamber; during the first four days there is no visible alteration in the tissues of the eye; but every day you see the bacilli multiply from this centre of origin. From the commencement of the fifth day, you note that the bacilli are spreading and increasing in number beyond the fragment of tubercle, to occupy the cornea and iris; but it is in the points where they abound and crowd them, that we see produced new epithelial cells, at first in small quantity, then in numbers more and more marked, till the tubercle nodule is found. The dimension of the tubercle and its richness in epithelial cells are always proportioned to the quantity of bacilli.

Facts of the same kind are observed in the kidneys when under the irritant influence of the bacilli. The parasites accumulate in the glomeruli, while the parenchyma is still completely intact.

It is proper to remark that these experiments have been performed on hares, which constitute the most favorable culture-field for the bacilli; in this animal tubercle flourishes and progresses always. It is not the same with the dog, which is little subject to tuberculosis; this animal offers so much resistance that inoculated tuberculosis remains ordinarily localized, and undergoes arrest; (Friedlander).

INOCULATION OF BACILLI.

A more satisfactory mode of proof that the bacillus is the origin of tuberculosis—now that the virulence of tubercle is under dispute; and that it is even supposed by many to be an indifferent product—is to make the bacillus undergo the direct test of inoculation. In respect to experiments of this sort, we are still chiefly indebted to Koch's conscientious labors, and the astonishing results which he and his coworkers have achieved. His experimentation seems to be absolutely conclusive, satisfying the most rigorous criticism. (See the second volume of his *Institut Sanitaire*.)

IMPLANTATION OF THE BACILLUS IN THE EYE, THE PERINEUM, AND THE BLOOD.

The bacilli have been cultivated in coagu-

lated blood serum, then carefully separated in infinitesimal quantity from the dried culture medium, and removed on sterilized platinum wire so that the inoculating material might be said to be absolutely free from all trace of blood and all other bacteria, being composed (as proved by microscopic examination) of the specific bacilli alone. The first bacilliferous material was obtained, sometimes from the tuberculous matter of the human subject (*i. e.*, from diseased lungs), sometimes from the fresh granular or caseous matter of the tuberculous monkey, from expectorated matters, from lupus (a tuberculous disease), etc. Inoculation was performed by injecting the material, suitably diluted with distilled water, into the anterior chamber of the eye through the cornea. Now, in all these cases, whatever might have been the animal operated on, the same phenomena were observed as by inoculation with tuberculous substances. With a liquid, poor in bacilli, there was slowly produced in the iris, a nodule which infected, little by little, the lymphatic glands, which were seen to undergo caseation; from thence the morbid process passed into the blood, to propagate itself into other organs.

When the culture liquid was rich in bacilli, the barriers of the tissue of inoculation and of the lymphatic system were rapidly overpassed, and numerous nodules appeared in the lungs, the spleen, etc., as if the bacilli had been injected into the blood. Can we not explain by these differences in the march of invasion, why certain tubercles undergo arrest and delimitation, and why in other cases the invasion is general and overwhelming.

Bacillary Injections in the Perineum.—Here are observed the same effects according to the quantity of implanted bacilli. When animals are operated on that are refractory to tuberculosis, such as dogs, rats, and white mice, they do not die till after several months, and present a very abundant eruption of tubercles in the viscera of the abdomen, but very few in the lungs.

These facts, which are irrefutable, demonstrate the superiority of the bacillary infection over the tuberculous infection. There is still another proof; some rats were nourished for several months with tuberculous substances without experiencing any appreciable effects; when an injection was made into the peritoneum of the cultivated bacillus, there followed a considerable eruption of tubercles.

Intra-Venous Injection of Bacilli.—When you inject a liquid very pure and free from solid particles, but containing bacilli, into the

veins, you produce a miliary tuberculosis more rapid and more extensive than that which develops spontaneously.

A Case of Hydramnion.

READ BEFORE THE DETROIT ACADEMY OF MEDICINE BY DR. W. R. CHITTICK.

Mrs. G., aged 20, nervous temperament, blonde, with hair a bright auburn color; weight about ninety pounds. Was married in August, 1884, to a man also of the blonde type with auburn hair, and a large and vigorous body. She became pregnant soon after marriage, and this was the inauguration of a series of troubles from which she has now about recovered.

Shortly after marriage she removed with her husband to Toledo. Soon symptoms of pruritus vulvæ began to develop. She sought treatment at her new home, but without relief. Then she determined to come back to Detroit and place herself under the treatment of her own family physician, Dr. George P. Andrews.

The pruritus was of a most aggravated type, and produced almost unendurable suffering, which she bore with heroic fortitude. This condition yielded to appropriate treatment in a short time, but only to be succeeded by parenchymatous inflammation of the left breast. This led to suppuration, and in a short time there was an abscess that discharged from two to three ounces of pus daily for more than two months.

When the end of the seventh month approached there began disturbances in the uterus. Before this the patient seemed so very large that her aunt, with whom she was living, thought she must surely be nine months pregnant, and thought that the labor, which came on at the end of the seventh month, was a confirmation of her suspicions.

On the evening of February 8, uterine pains became so strong that she sent for Dr. A. He, anticipating, from her general condition, that labor might begin, sent me off immediately to see her. When I arrived I found the os dilated nearly one and one-half inches. She told me she had not felt life for four or five days. On examination I became convinced that labor had begun. I so informed the relatives, and proceeded to gently dilate the os with my fingers. Soon the pains became stronger and the os more dilated.

The condition of things did not alter much

during the next two hours. I had made a careful vaginal examination, but the bag of water was so large and tense that I could not make out the presentation of the fœtus. Then I made a careful abdominal examination, but was unable to determine anything. This, I confess, puzzled me very much. If I had an abnormal presentation to deal with, I wanted to find it out before the membranes ruptured. I examined a second and a third time with no better results, except that I thought I could feel a rim of some kind, and this led me to suspect that perhaps the fœtus was an acephalous monster. Fortunately I did not tell the people so.

The os was now sufficiently dilated and the pains were accomplishing little, so, having got ready to receive whatever might come, I ruptured the membranes with my finger-nail. The waters came with a gush and plentifully, I should say about two pints, and with it the head and in the right occipito anterior position. I breathed freer. The pains grew stronger and the head advanced nicely. Just as the child was born there was a great gush of fluid which, owing to the sheet being over the patient, I could not see, that greatly alarmed me. Having in my mind a case of post-partum hæmorrhage I had had some days before, I thought the fluid was blood. Hastily calling to the aunt, who was assisting, to remove the sheet, in the meantime endeavoring to stop the flow with one hand in the vagina, and the other grasping the uterus through the abdominal wall, I was relieved and surprised to find that the fluid was not blood, but amniotic fluid. It seemed as if everything was flooded, and I do not think I exaggerate when I say I think there was eight or ten pints of fluid.

The placenta did not come away immediately. I was obliged to work with it for about twenty minutes. I feared it was adherent, but getting one edge down it came away slowly. There was little hæmorrhage, and I took good care that the uterus remained well contracted.

The fœtus did not appear to be older than seven months. It was dead, and the abdomen was greatly distended and seemed full of fluid. The skin had a peculiar mottled appearance. I was not permitted to open the fœtus, nor to dispose of it, as I friendly offered to do.

The patient made a very good recovery from her labor, but the breast did not heal up as I expected it would. About two weeks

after her labor the breast was distended with hot water and afterwards injected twice a day with a 50 per cent. solution of boro-glyceride. After this it commenced to heal up nicely until she caught a cold. Distention, and a continuation of the injections was recommended again, with a request that she report if the breast did not continue to heal. I have not heard from her lately, and I presume it has ceased to trouble her.

Since writing the above, the patient again made her appearance. She stated that her breast was still discharging, and that the quantity had increased until it was nearly as great as before. This began after a severe chill. She also noticed that about once a week she was much worse than during the rest of the time. This led to an investigation, the result of which was, that she was placed upon quinine, with iodide of arsenic and sulphide of calcium. A drainage tube was inserted in the cavity in the breast, and adhesive straps firmly applied.

She was seen twice during the following week. The second time the cavity was nearly closed, and the discharge had almost ceased. Altogether, during that week, she had improved, it seemed to me, about seventy-five per cent.

An Example of Bad Hygiene of the Eye.

BY H. B. HEMENWAY, A. M., M. D., KALAMAZOO, MICH.

A FEW months ago Miss V. M., aged 26, was brought to my office by her family physician to have her eyes examined and fitted with spectacles. She was a light complexioned young lady who spent much of her time sewing. Her whole life had been spent on the farm where she now lives. Though she had not been sick enough to prevent her working, she had been under the doctor's care for some time. He was treating her for uterine displacement. Her bowels were torpid. Menstruation fairly regular. Otherwise her general health was very good. She was neither stout nor strong. She complained that light, especially if reflected, hurt her eyes. She was apparently myopic, and on that account she came to my office. Upon examination we found retinal hyperæsthesia, though it was not very marked. The myopia was purely spasmodic. So far as the eye itself was concerned, vision was normal, or nearly so. Early in the day she had no trouble in reading No. 40 test type at the distance of 18 feet, and she could read it at 20 feet. After

she had been walking around town sometime, attending to her shopping, she had difficulty in reading No. 30 test type at the distance of 18 feet, and sometimes she could not read No. 40 at 20 feet. I advised Miss M. not to wear any kind of glasses, but to rest her eyes as much as possible. I recommended that her physician put her upon constitutional tonic treatment.

Not many weeks later Miss L. M., aged 29, a sister of the above described patient, came to me for advice. She also was light complexioned and not very strong, though by no means sick. Menstruation regular. Bowels constipated. Had measles about two years ago, and since that time her eyes had been weak. She complained of pain in the eyes and headache, caused by riding on a bright day. Thought the light reflected from the road and fences particularly annoying. She consulted me on account of difficulty in seeing to read and sew. She said the trouble was increasing. Ocular examination showed retinal hyperæsthesia and asthenopia with a little hypermetropia. I prescribed tonics, both general and intestinal, and glasses O. D. x 30; O. S. x 28 for use in reading and sewing. So far as I have heard the results are entirely satisfactory.

But why relate these ordinary cases? There is nothing novel in their nature or treatment. Nor is the cause a rare one. They are, however, apparently such clear cases of the neglect of Nature's warning, that the writer has thought them worthy of study.

The father, aged 62, is one of four children, all healthy. His father was three times married and in all had, I think, 19 children. I believe all these children are now alive and well. The old gentleman had always been healthy and had good eyesight up to his final illness last winter. So far as I have been able to discover there have been no abnormalities of vision, nor trouble with the eyes in the father's family.

The mother, aged 60, is now blind from glaucoma, I am informed. One brother is near-sighted. Two sisters are "old-sighted."

To this father and mother were born three boys and three girls, all living and strong, except the two daughters whose cases have been described. The oldest child is a girl, aged 29. The youngest, a boy, aged 17. They live in a healthful place and in a good house. General surrounding in good sanitary condition. The room used for dining and living room is on the west side of the house, and has two windows toward the west.

West and a little south of the house is a large barn, always kept well-painted, red. Between the barn and the house there are some large trees, but the lower limbs are so high that they do not at all hide the barn. While questioning Miss L. M., she accidentally mentioned the fact that the sunlight reflected from the barn in the morning was particularly trying to her eyes. Following up the pointer given, I discovered the following facts: In the morning the sunlight is reflected from the barn into the dining-room. Of course it is the red or irritating heat rays thus especially reflected. At supper time the direct rays of the sun shine into the windows. As the family have been accustomed to sit at the table, Mrs. M. and these two daughters were the only ones that faced the windows, and so received the light reflected from the barn. Until within about a year, the mother sat where she would receive more of this light than her daughters, and Miss L. had been seated where she would receive the least of the three. When her mother's eyesight failed, Miss L. changed places with her. Since that time Miss L.'s trouble has rapidly increased. These three are the only members of the family who have trouble with their eyes.

The barn and house have been in their present relative position for 17 years or more, and the barn has been painted red all this time. The family have had shades over the dining-room windows, but when the shades are down the room is too dark. I understand that the mother has oftentimes suggested that the reflected red light might be the cause of her trouble, but the good father laughed at it as a woman's notion.

While recognizing that *post hoc* is not of necessity *propter hoc*, yet to the consulted physician it seems strongly probable that the mother was correct in her supposition. If so, would not the simplest and best solution of the problem for the future, be placing pale-blue glass in the dining-room window sash?

Correspondence.

LONDON, April 10.

EDITOR DETROIT LANCET,

Sir:—To every physician visiting this city, Sir Joseph Lister's Clinic at the King's College Hospital is of course a great point of interest, and one not to be missed. And it will repay the visitor, not only to see his work, but to see the man who has made his name known to every educated, well-read lay-

man of the city, and has not only won a knighthood from the Queen, but also a decoration from the Emperor of Germany, bestowed within the last few months.

Tall, large, with long, iron-grey hair and side-whiskers, a pleasant face and modest address, he would attract attention even among those who did not know his name or fame. One operation which he performed at his weekly Friday clinic, may be of interest. The patient was a child five months old. At birth a small *nævus* over sterno-mastoid muscle of left side, midway between clavicle and ear, was noticed. This increased in size very rapidly. Injections of carbolic acid were tried with seeming good results for a time, the tumor diminishing and growing harder, but latterly it had enlarged again, now extending from lobe of ear to clavicle, and being of an irregular, circular shape about three inches in diameter. If left alone the child stood but a poor chance of life, while the operation was so formidable that the operator said he should not be surprised if death on the table occurred.

The anæsthetic used was chloroform, and the method of operation, excision with the knife. An incision along the anterior edge of the tumor was made, keeping wide of the diseased portion in order to cut the supplying vessels before they divided into their numerous branches, as in this way only could they be picked up with artery forceps, and hæmorrhage arrested. The anterior edge of the tumor was raised and the carotids pulsating below were fully exposed. By alternately cutting and dissecting with scalpel-handle backwards, the central artery of the base of the *nævus* was found and ligated before being divided.

The same procedure of cutting wide of the growth and dissecting up was then done posteriorly, and the mass removed with but little loss of blood.

The denuded surface was triangular in shape, extending from mastoid process downward to clavicle and covering the greater portions of both anterior and posterior triangles of the neck.

The edges of the wound, though so widely separated, were brought together by several stitches of very large silver wire to stand the tension, while between these stitches cat-gut sutures were used to approximate the lips of the wound.

In all cases where great tension occurs Prof. Lister uses stitches of silver wire, of the size ordinarily used for probes, introduced at

some distance from the edges of the wound. These bear a great amount of tension without cutting through, and the results are very satisfactory, especially in cases of removal of the mammary where a large portion has been sacrificed. The wound was dressed with the ordinary antiseptic protective and gauze, and the patient rallied well, though at one time the shock was so great that the operation was suspended for a few moments. Everything was done under the spray, which Prof. Lister still uses, though it has been pretty generally given up in the London hospitals, except by the ovariologists.

The specimen on being cut through was found to be about one and one-quarter inches thick, and in the centre the effect of the carbolic acid injections was very evident. Here it was much harder, coarser, and less abundantly supplied with vessels, these evidently having been compressed in the contraction which this portion had undergone. The effects of the injections were so evident and favorable that the operator regretted that they had not been persevered in longer, and the operation delayed.

Prof. Lister mentioned an interesting case then in the infectious ward of the hospital.

The patient, after undergoing an operation, developed small-pox while still in the wards. The wound and surrounding skin had been covered with a piece of gauze, of well-marked out-line, dipped in a solution of carbolic acid. While the patient had pustules developed generally over face and body, the portion covered by the carbolized gauze escaped, and remained perfectly clear, except at the extreme edges of the patch. It was supposed that the carbolic acid induced in the chorium a resistant action to the variola poison.

To the very few misdemeanors which cocaine stands charged with so far, Dr. Lawson has one to add.

In removing a growth from the posterior wall of the pharynx in an old gentleman, a four-per-cent. solution of cocaine was used, about ten grains of the drug in all being consumed, as the operation was of some length. After leaving the patient comfortable, he was summoned in about one hour in great haste. He found, on arrival, complete paralysis of the muscles of deglutition. The patient was naturally much frightened. This condition lasted about two hours, and gradually passed off, the ability to swallow having been entirely regained by evening.

Examinations are at hand, and students are

working anxiously and industriously. Several Americans are working for the degree of M. R. C. S. As it is requisite that a candidate should have taken *some* course in an English institution, the Americans unanimously prefer the "School of Vaccination," where the course is short and cheap. Two weeks, I understand, is the time they are supposed to attend, but I fear this rule is not fully lived up to. This short-cut method of getting around a troublesome rule of the Royal College appeals strongly to the American spirit, which is never so happy as when "beating a corporation."

The excitement of preparation for a possible war invades even the ranks of our peaceful profession. Volunteer corps for the medical service are being formed in the large medical centres, and notices are posted at many of the schools calling for those willing to volunteer for service in India and Egypt to send in their names. The medical service in the Soudan is spoken of in the highest terms in the daily press.

DR. A. W. HURD.

Proceedings of Societies.

Detroit Academy of Medicine.

MARCH 3, 1885.

The Academy met at the office of Dr. Thompson. The vice-president being absent, Dr. Noyes was called to act as chairman.

Dr. Connor introduced a patient of whom he gave the following history: This patient came to my notice on the 23d of last month. He is a tailor by occupation. Until the present attack, six weeks ago, his health was good. A few years ago he had a urethritis, which might have been something more. The present attack is one of a partial paralysis of a number of nerves. The right side of the face was especially affected, the skin being numb, the muscles of the eye except external rectus paralysed, the sense of taste impaired, etc. Owing to the strabismus due to the paralysis of the ocular muscles, there was double vision, the eyelid drooped, the pupil was dilated and irregular from adhesions, vision $\frac{3}{8}$. The tongue could be protruded, but with difficulty. The patient could not eat solid food. Taking my clue from the history of urethritis, I gave him iodide of potassium, iodide of mercury and iodide of iron. The patient did not make as rapid im-

provement as I could wish, and after four days, I gave him in addition to the mercurial treatment pilocarpine subcutaneously. Yesterday I found vision $\frac{1}{8}$; pain in the head diminished. The case is interesting from the large number of nerves involved. The lesion must be back of the Casserian ganglion. The effect of the treatment thus far gives reason to hope for absorption of the inflammatory product and ultimate recovery. The patient is deaf in the right ear. The cause of the trouble may have been a localized meningitis.

Dr. Noyes: It is seldom that we see so many nerves implicated as here. About the only remedies that will be of any use are mercury and potassium iodide. In one syphilitic case I treated, in which the third pair of nerves was involved, I made use of mercury by inunction, under which the patient rapidly improved.

Dr. Connor: Ophthalmoscopic examination shows no abnormal appearances. The only movement of the eye is outward.

WRITTEN COMMUNICATIONS.

Dr. Farnum read a paper on Tuberculosis, dwelling especially upon its etiology, and its connection with the bacillus tuberculosis. (See LANCET, May 1885, p. 489.)

Dr. Andrews: The theme of the paper is one of the most practically interesting subjects now before the profession. The pursuit of the study is so largely the work of experts, that our conclusions necessarily wait on the progress of scientific discovery. It is useless for us at present to attempt to dogmatise. That there is a bacillus peculiar to tubercular disease, appears to be pretty well established—almost as certainly as that there is a similar organism constantly present in anthrax. Whether the bacillus is to be regarded as causative or not, is, however, not yet decided. If it could be proved, it would be a long step in advance, pointing not only to greater certainty of diagnosis, but to a hope that we may by and by find a rational and successful treatment for this insidious disease. If it shall be established by experiment that tuberculosis is in truth a contagious disease, we may take courage from the history of the past, which shows how the contagious diseases that once swept away whole communities, have either wholly disappeared from the civilized world, or have ceased to be regarded with dread. I have examined with a good deal of interest a number of cases of consumption, with reference to the presence or absence of

the bacillus. I have not always found it where it was to be expected. In one case of laryngeal tuberculosis, I examined the sputa repeatedly in vain. But, although I did not find the bacilli, they were really present, for a post mortem examination revealed the fact that the lungs also were diseased, and, although there had not been as yet any breaking down of tissue, the incipient abscesses throughout the lungs were swarming with bacilli. In other cases, however, where the sputa were purulent, and contained fragments of lung tissue, I yet sometimes failed to find the bacilli. Sometimes there would be now and then found bacilli in abundance, which at other times would seem to be wholly absent. In one instance, when the symptoms did not indicate the existence of serious lung disease, bacilli were found in multitudes in the sputa the first time we examined them, although we found but few in subsequent examinations.

Dr. Connor: I am not an expert microscopist. I am not, therefore, in a position to say anything. The subject, however, is one of great interest, in view of the fact that one-sixth of all the deaths in Michigan are from tuberculosis, and in the New England states the ratio is even greater.

From what I read, it appears that the German government is about to repeat in this century the action taken in the last by the Italian government, to protect the people from the contagion of this disease. In Italy a hundred years ago the consumptive was banished from society as completely as the leper.

A few years ago Dr. Formad reported as the result of numerous examinations made in the hospitals of Philadelphia, with a view to ascertain whether there was any peculiarity distinguishing tuberculous and scrofulous patients, that he found in this class of patients a certain inadequacy in the lymphatic system, which, to him, seemed to furnish a clue to the nature of the disease.

His theory seemed not only to explain the character of the malady, but to justify as rational the mode of treatment which experience has shown to be most successful.

A study of tuberculous eyes, reported in the *London Ophthalmological Review*, failed to reveal the presence in the tubercular matter within the eye of bacilli. In fact the relation of the bacilli to tubercular deposits may be similar to that of the carrion crow to the dead horse, more in the nature of an effect than of a cause.

If it is true that tuberculosis is produced by bacilli, we are no nearer than we were before to a cure. We are told that these bacilli have an astonishing tenacity of life; there is no way of destroying them without fatal consequences to the patient. This does not seem to me a hopeful prospect for the rewards of scientific research.

Dr. Lyons: Science seeks only to know the truth. If consumption *is*, as experience has shown, an incurable malady, it can do no harm to understand why it is incurable. Let us learn all we can by the aid of the instruments of research which science offers us; we shall see many of our favorite theories overthrown—many fanciful explanations of the action of remedies (real or fancied) must be given up with the widening of our positive knowledge. It is easier to cling to the old fancies, which are in a sense justified by the results of experience, but it is wiser and more manly, and more profitable, too, to put by all prejudice, weigh impartially the evidence and then shape practice, not by drawing conclusions from the hypotheses of science, but, using those hypotheses merely as means of grasping the facts, by the old-fashioned method of rational empiricism.

Dr. Noyes: The alleged facts in regard to the germs or micro-organisms that are now believed to cause disease are not yet established.

Dr. Klein says that in India the tanks from which the people draw their drinking water are swarming with the comma bacillus to which Prof. Koch attributes cholera.

Dr. Farnum: According to the most expert examiners, only about 50 per cent. of those affected with tuberculosis show in the sputa the presence of bacilli. The tissues must be broken down. The communication of tuberculosis by injection of an extremely minute portion of the pure culture of the bacillus affords proof positive of the causative relation of this organism to the disease. Virchow has admitted that the disease produced by the injection of non-specific matters is not true tuberculosis. Formad's theory might account for the production of disease by the entrance into the system of non-specific foreign substances, as in the case of miners' consumption, etc.

Dr. Connor: Why is it that so few of those who are exposed, as nearly all of us must be, through abrasions of the mucous membrane of the throat, become tuberculous?

Dr. Farnum: It is not easy to answer. It may be that the temperature, at the critical

period, is too low. The bacilli require, for propagation, a temperature of at least 95° Fahr.

VERBAL COMMUNICATIONS.

Dr. Jenks: I would like to report a case. Last Saturday evening I received a dispatch asking me to come at once to see a patient out in Canada, and to bring obstetrical instruments. I found three physicians in attendance—Dr. O'Keefe, Dr. Abbott, and Dr. Brady, of Chatham. The patient had been in labor since three o'clock in the morning, but delivery was obstructed by intrusion into the pelvic canal of the hip-bone, the result of an injury which the patient had received. Previous to the injury she had given birth to one child. The head presented, but would not engage in the superior strait. Attempts had been made to apply the forceps, but without success. The cord being down, and the child dead, the physicians had perforated the head, but yet had failed to cause it to engage. Morphine had been given, to allow the patient to rest somewhat. It had been decided that delivery could not be accomplished except by cæsarian section. I tried myself to bring down the head by the use of the hook, but neither with this nor with any other instrument could I accomplish anything. The child did not seem to be lying in the usual position, but appeared to be stretched at length, giving the womb an unusually elongated form. I was convinced that the operation of cæsarian section afforded the only possible chance of saving the woman's life, and so, at about three o'clock Sunday morning proceeded to operate. I had to begin my incision near the ensiform cartilage, the womb was so elongated. The uterus looked as if it had been bruised in spots, and was unusually vascular. In cutting down I came upon the placenta, and hæmorrhage was very profuse. In removing the child, the uterus was torn down quite to the bladder. The hæmorrhage was excessive. I was obliged to put in eleven sutures, then sponged out the cavity of the peritoneum, and closed the external wound with deep and superficial sutures. The patient rallied well from the operation, and I left her in a comfortable condition, but I was not surprised to receive word that she died yesterday morning, having survived the operation two days and two nights.

Adjourned.

MARCH 10, 1885.

The Academy met at the office of Dr. An-

draws. In absence of the vice-president, Dr. Noyes was called to the chair.

WRITTEN COMMUNICATIONS.

Dr. Sprague read a paper on *Massage*. (See LANCET, May 1885, p. 481.)

DISCUSSION.

Dr. Wyman: Dr. I. H. Hamilton, of Tecumseh, has for many years practiced uterine massage, and has by this means treated successfully many cases in which other modes of treatment had been unavailing. In his manipulations two or more fingers of one hand are introduced into the vagina, while the other hand is applied to the abdomen of the patient. The experiments of which Dr. Sprague gives an account, showing the effect of massage to reinvigorate muscles exhausted by protracted use, are not conclusive, unless so conducted as to eliminate the elements of imagination and will.

Dr. Cleland: The use of massage in connection with electricity, as described by Dr. Sprague, I think likely to be of service. Such difficulties as lumbago are benefited by friction, and electricity is also in the same class of cases a remedial agent of acknowledged value. A judicious combination would no doubt be better than either one alone.

Dr. Connor: I remember that when I was quite a boy, there was a man living in the same neighborhood who used to cure headaches by manual manipulations upon the head. His mode of practice was at that time novel, but is now common, and very frequently successful. The physician often meets with cases where there has been a disturbance in the equilibrium of the circulation and of nutrition. Some muscles or tissues are doing more than their share of work, others less. To restore the equilibrium, I take it, is the object of the operations that have been described in the paper read. We have recognized the value of these operations, but in this city, until recently, there has been no one to whom we could refer our patients when in need of this kind of treatment. About eight months ago I read Pagenstecher's observations on *Massage of the Eye*. I have practiced it since to some extent, and in a large number of cases with satisfactory results.

Dr. Emerson: The subject of the paper is one that has always been of interest to me. I was brought up in a country where massage was practiced as a remedy for nearly every ill that flesh is heir to. All manner of

aches and pains, even old sprains and ankyloses, etc., were treated, and with astonishing success, by the *lomilomi*, as it was called. The treatment was not scientific, and yet embodied the observations of generations of empirical specialists. The manipulations were varied to produce different effects. To cure a headache, stroking, with or without pressure, was employed; for the relief of weariness, kneading of the muscles, so as to stimulate the circulation, and aid the process of nutrition and repair, was the method in every-day use. Again and again, I have experienced in my own person the recuperating influence of this operation. It not only removes the sense of weariness, but it prevents the lameness and soreness that would otherwise be felt after severe and protracted labor. Among the Hawaiian chiefs the *lomilomi* was resorted to also as an aid to digestion, after gluttonous indulgences.

What was said about electrical massage recalls a case of my own which illustrates some unusual effects of such a mode of treatment. My patient, from long use of opiates, had become obstinately constipated. I anticipated relief from this difficulty in the use of electricity in combination with massage, and I was not disappointed in this. The method pursued was this: I placed the negative electrode on one side of the abdomen, and with the free hand applied the faradic current, along the course of the colon, at the same time kneading the abdomen gently. The immediate effects were such as I anticipated, but the patient sent for me soon after in considerable alarm, finding herself strongly electrified, and this condition lasted several hours. I have never seen a similar instance, and am at a loss to account for the effect on any principles of physics with which I am acquainted, and it seems hardly sufficient to say, vaguely, that it may have been the result of imagination. The patient would scout such an explanation.

Dr. Jenks: I have had some experience with massage, having made use of it in my private hospital, and I have obtained pronounced benefits from it. I have not found massage of the uterus of any great value. In many neurasthenic patients I find that general massage is very useful. I have employed in connection with it also the galvanic current, applied by means of the electrical brush.

Dr. Noyes: I have been following up with interest the accounts of the use not only of massage, but of other similar modes of treat-

ment, such as the Swedish movement cure. When in Berlin, I visited Prof. Behren's institution; in which the exercises of different parts of the body were made a special study. The professor would write regular prescriptions for his patients. In the gymnasium there were all sorts of appliances to bring into exercise the various muscles. Some cases were treated by confinement to certain positions, by mechanical appliances, etc. Thus curvatures of the spine were often remedied. Photographs of the patients taken when received and again when discharged were preserved, showing strikingly the beneficial results of treatment. Cases of torticollis were here treated successfully without operation.

In considering any of these modes of treatment we must make allowance for the influence of imagination, or of the mesmeric influence, if you please. I have seen most remarkable instances of the curative effect of psychical influences, and I can credit almost any statement in regard to the effects of any given mode of treatment given a patient reposing in the physician implicit confidence in his resources, ability and skill.

Adjourned.

MARCH 17, 1885.

The academy met at the residence of Dr. Gillett.

In absence of the presiding officer, Dr. Gillett was called to the chair.

Dr. Connor stated that the *Index Medicus* has been resuscitated, and that it is to be now published in Detroit, by Geo. S. Davis. It has never received the support it deserved from the profession. Every medical society ought to subscribe, if only for the sake of securing to the profession the advantages to be derived from such an aid to literary work.

After some discussion, it was voted that the academy renew its subscription to this publication.

The discussion having touched on the possibility of making the public library of greater service to the profession, by suggesting to the librarian purchases of desirable books, a committee was appointed to wait upon the librarian and confer with him in regard to such purchases. The committee consisted of Drs. Chittick and Connor.

PREVAILING DISEASES.

Dr. Connor: For the past three weeks there has been prevailing in the city what

may be called an epidemic of acute conjunctivitis. Some of the cases have been mild, others quite severe. These has been, in most cases, an unusual amount of pain accompanying the attack. In several instances, more than one member of a family has been attacked. Generally, the first case in a family has proved the most severe.

I have seen several cases also of deafness, coming on during an attack of intermittent fever, in children six to nine years old.

One patient had quite a high fever. Temperature, 12 to 16 hours out of the 24, was 105° F. Quinine did not seem to have any effect. Being called in consultation, I suggested the addition to the quinine of $\frac{1}{16}$ grain of cocaine muriate, the dose to be repeated every hour. The effect seemed to be immediate and unmistakable, the child recovering from the depression that had been so marked, and the quinine apparently beginning then, for the first time, to have its proper effect. There was no disease of the middle ear to account for the deafness; no catarrhal condition. It was certainly not caused by the quinine, for it came on simultaneously with the first chill, before any quinine had been exhibited.

Dr. Pomeroy has collected a number of cases of this kind, but does not regard the deafness as the result of malarial poisoning.

Dr. Yemans: I have seen one case of deafness such as the doctor has described.

Dr. Chittick: I have had one case of croupous pneumonia.

Dr. Yemans: We may expect that the death rate during the coming month will be very high. The old, and the phthisical, will succumb, vitality being exhausted by the long period of severe weather through which we have just passed.

Dr. Connor: Many old people expose themselves quite needlessly, and perish, as the result of their imprudence. They cannot understand why they should take precautions now in their old age, to which they have been unaccustomed.

Dr. Yemans: I have had a case of acute prostatitis, that has given me a good deal of trouble. It was probably the result of a gonorrhœa, which the patient had had some months ago, and which left him with a stricture. The case has been especially troublesome, because I could not employ suppositories in the treatment, owing to the enlarged condition of the prostate.

Dr. Thompson reported that he had seen two cases of dog bite.

Adjourned.

MARCH 24, 1885.

The Academy met at the office of Dr. Connor. In the absence of the vice-president Dr. Bradley was called to the chair.

WRITTEN COMMUNICATIONS.

Dr. Maire read a paper on Hematuria (see LANCET, May 1885, p. 488).

DISCUSSION.

Dr. Yemans: Is it well established that there is a sphincter at the neck of the bladder? I have never seen one demonstrated, and have never been able myself to find one.

Dr. Maire: If there is not a sphincter, what is it that controls the flow of the urine, and how can the effect of belladonna be accounted for?

Dr. Connor: The diagnosis in cases of hæmaturia is not so easy a matter as that of a senile cataract. I remember seeing a case with Dr. Andrews some years ago, which was not a little perplexing. The patient had Bright's disease, but our conclusion with regard to the source of the hemorrhage was that it came from the bladder. Once ergot was given, and brought on pains like labor pains. At another time mistletoe stopped the hemorrhage. Post mortem examination showed that the secreting structure of the kidneys was nearly all gone. There were numerous abscesses in these organs, but the seat of the hemorrhage was as we had supposed in the bladder, where we found a villous growth.

When we find in connection with the hemorrhage a cachectic condition of the patient, we look for malignant disease.

Dr. Noyes: In the account given of the treatment of hæmaturia, no mention was made of injections into the bladder. I have had but one case, and in that the hemorrhage was plainly from the kidneys. I made use of cupping, and the patient soon recovered. I recall cases that my preceptor treated by injections into the bladder, which gave temporary relief, but were of no permanent benefit.

Dr. Chittick: I have come personally in contact with but two cases of hæmaturia. In one, already spoken of by Dr. Connor, there was abundance of blood in the urine. The hemorrhage was controlled by ergot and mistletoe.

In the other case, which was under the

treatment of Dr. Andrews, we were not certain in regard to the origin of the blood. We did not find in the urine at any time villous tufts from the bladder. No remedy seems to have much influence in this case. Once the patient thought himself cured by a bottle of Dr. Hartley's medicine, but he soon found himself as badly off as ever. He, however, seems likely to live a good while.

Dr. Gilbert: One case I had puzzled me until I observed that the attacks came on every other day. Under the use of antiperiodics trouble disappeared, and was thus shown to be of malarial origin. In any case hæmaturia is only a symptom. We are in every case to seek out and, if possible, remove the cause. When we are ignorant of the cause, we use remedies which contract the capillary blood-vessels, and often the treatment is successful. Rest is always appropriate. Stimulating drinks are to be avoided, and stimulating diuretics.

Dr. Carstens: Malaria is, in my experience, the most frequent cause in this region of hæmaturia. Antiperiodics at once clear up the diagnosis and cure the patient. A diagnosis may often be made out by examining the urine. When there is malignant disease cancer cells may be found. If the seat of the hemorrhage is in the bladder, the amount of blood will often vary in different portions of the urine voided at one time. By thoroughly emptying the bladder and washing it out, it is possible to obtain urine just as it comes from the ureters.

I am reminded of a case that came under my care some years ago, a patient from Canada. He had been treated by many physicians, and with a great variety of remedies. "It is of no use," he said, "to give me iron." I prescribed a combination of tinc. ferri mur. with a little tincture of opium, just enough to give the mixture a rich color, and the next day the blood disappeared. This may have been the effect of the medicine—possibly the opium in the prescription may have modified the effect of the iron, and so brought about the result. Or change of scene and diet, etc., may have been the important factor in the case, for which, however, of course the medicine got the credit.

Dr. Cleland: I had two weeks ago a very instructive case. The patient was a young man. He had had a sore throat, and I afterwards learned had had a rash, as had also other members of the family. The glands of the neck were swollen, and the case when I first saw it suggested the idea of scarlet fever

I had prescribed for him already with only an imperfect history of the case; now I was called to him on account of severe symptoms that had suddenly supervened. The patient was feverish, had a severe headache, urine loaded with blood. I found him on a second visit in a convulsion. I gave him pilocarpine hypodermically and put him in a hot pack, and brought him out of the convulsion. The urine was heavily loaded with blood, and when heated showed 33 per cent. of albumen. I prescribed a powder of calomel and soda, followed by elaterium, keeping all the eliminating organs active. Under this treatment there has been gradual improvement. After the urine lost its bright red color, there would appear in it as it cooled a black deposit, resembling coffee grounds.

The blood often comes from the bladder. When it comes from the kidneys, unless in large quantities, it is not fresh red blood, but altered in character, having a black rather than a red color. When it comes from the bladder it is oftener of a bright color, and always uniformly mixed with the urine.

Dr. Maire: When due to villous growths, we can often make a diagnosis by the appearance of the patient, from the varicose condition of superficial bloodvessels. From what point is the blood supposed to come in the cases said to be malarial in origin?

Dr. Carstens: Probably there is congestion of the kidneys in these cases, as we know that other internal organs are congested.

Dr. Wyman: Blood cannot be retained any time in the kidney. Possibly it might accumulate somewhat in the pelvis of the kidney, but not to any extent. If blood, having its origin in the kidney, is accompanied by pus, we may refer the lesion to the pelvis of the kidney, and we shall find then the casts peculiar to the pelvis. When the blood comes from renal obstruction, there is proper albuminuria. In cases due to malarial poisoning, the hematuria would disappear under ergot, buchu, etc., and reappear. I do not see how we can have congestion without albumen.

Dr. Gilbert: In cases of hæmaturia after scarlatina, due to nephritis, to be successful in treatment, we must treat the nephritis.

In regard to the existence of a sphincter of the bladder, I may say that such a thing must have a functional, if not an anatomical existence.

PREVAILING DISEASES.

Dr. Yemans: I have seen a number of

cases of phthisis, made worse by this severe weather. In the case of prostatitis, mentioned last week, four days ago the urine began to flow again. To-day the patient voided two ounces of pus, and the symptoms have ameliorated. The pus formed in the prostate.

Dr. Cleland: I have seen a good many cases of acute catarrhal fever, beginning with coryza, the disease extending to the bronchi, and running a course of four to seven days. I have treated in the usual way, with quinine and diaphoretics. I have seen a few cases of scarlet fever—one, of malignant type, proving fatal in thirty hours. There are a good many cases of sudden death in old people, from cold lowering the heart tone. There is some measles and chicken-pox.

VERBAL COMMUNICATIONS.

Dr. Wyman: I have lately had occasion to try the effect of cocaine in a case of excoriation of the vulva. I had a solution made containing five grains of the muriate in an ounce of castor oil, and found it to afford relief.

Dr. Chittick: In the treatment of epistaxis, I find the best way to plug the nares, is first to introduce a common wax taper, such as is used for lighting the gas, softened by slightly warming in the hand. A string is attached to either end of this, and by this means a piece of sponge is brought into position to serve as a plug.

Dr. Cleland: I may mention a novel use of cocaine, namely, in the treatment of a blister. A four-per-cent. solution of the salt was applied in the form of a spray, relieving the pain completely.

Dr. Carstens: I do not know of any better way of plugging the nares than by a condom, introduced first and then inflated.

A. B. LYONS, M. D.,
Secretary.

J. E. CLARK, M. D.,
President.

American Medical Association Meeting for 1895, Held at New Orleans.

The meetings, general and special, were held in Tulane University and adjacent rooms. Provisions for these meetings were ample and most convenient.

At 11 o'clock, a. m., April 28, the meeting was called to order by Dr. Samuel Logan, chairman of the Committee of Arrangements. After prayer, the president, Dr. H. F. Camp-

bell was introduced. The vice-presidents, secretaries, and treasurer were at their posts.

Dr. Logan gave a very hearty welcome on behalf of the people and the profession of New Orleans to each member of the Association.

Fitting mention was made of the locality in which the meeting was held, and of the departed Nestor of the profession, Dr. S. D. Gross.

After some minor business, the vice-president, Dr. J. S. Lynch, of Baltimore, took the chair, while the president delivered his address.

In his unrivaled manner the speaker alluded to the progress made in medicine and surgery during the past year, to the hope he had that the younger men about him would do very much to carry forward this progress in coming years. He alluded in fitting terms to some eminent dead workers, and some living ones. The New Orleans of the past he contrasted with New Orleans of the present—to the great advantage of the present. To the work done in the sections of the Association he gave commendation, expressing the trust that this would be greatly increased in the future. To the *Journal* of the Association he accorded full approval of what had already been accomplished, and of the existing plans for its future development. Lastly, he touched upon the topic of Forensic medicine, suggesting that a committee be appointed to consider the ways of rendering this branch more popular in the Association.

On motion, a vote of thanks was given the president, and the address referred to the publication committee.

On motion, a committee of five was appointed to consider the president's recommendations.

Dr. T. G. Richardson, of New Orleans, in behalf of a special committee appointed last year to take action respecting the death of Dr. S. D. Gross, read a report written by Dr. Austin Flint, Sr. As for many years Drs. Flint and Gross were associates, and always warm friends, this report was the dictate of the heart as well as of the head. It is an honor to both the dead and the living friend and places in written language the deep regard felt for Dr. Goss by the Association, as well as by his immediate friends.

The report was unanimously accepted and referred to the Committee on Publication.

Dr. J. S. Billings reported the success of the efforts made to secure an appropriation for the erection of suitable buildings for the

Army Medical Museum and Library. This report was received and adopted.

Dr. Billings also reported the progress already made by the committee appointed at the last meeting of the Association, to secure the International Medical Congress for America in 1887. He showed that the committee had secured the promise of the Congress to meet in Washington in 1887. He also showed by the published plans of the committee the plans of organization, the officers selected, the progress of all the details of the work. As this report has been published and sent all over the world some weeks since the members of the Association were entirely familiar with its contents.

On motion of Dr. J. M. Kelley the consideration of this report was made a special order for Wednesday at 12 m.

Several gentlemen were made members by invitation.

Dr. R. A. Kinlock of Charleston by the request of the State Medical Society of South Carolina presented a communication relative to the discovery of the anæsthetic properties of ether.

On motion this was referred to the section on Practice of Medicine

Adjourned.

WEDNESDAY, April 29.

The Association was called to order at 10 o'clock, a.m.

After reading some telegrams from absentees, the secretary read the names of the committee on nominations.

Dr. Didama, as chairman of the section on Practical Medicine, read the address on Practical Medicine, Materia Medica, and Physiology.

He was followed by Dr. R. S. Sutton, who read his address as chairman of the section on Obstetrics and Gynæcology.

Both papers were accepted and referred to the publication committee.

Dr. W. C. VanBibber, of Baltimore, Md., read a paper upon "Peninsular and Sub-Peninsular Air and Climate."

The time having arrived for considering the report of the committee, Dr. J. V. Shoemaker, of Philadelphia, made a vigorous report against the report being adopted.

Dr. Billings replied at length, giving the committee's view of the matter.

After a long and somewhat rambling discussion, the following was adopted:

Resolved, That the committee appointed by

this Association to arrange for a meeting of the International Medical Congress in America, in 1887, be enlarged by the addition of thirty-eight members, one from each state and territory, the army, navy and marine hospital service, to be appointed by the chairman of this meeting, and that the committee thus enlarged shall proceed at once to review, alter and amend the motions of the present committee as it may deem best. An amendment was added to this resolution, to the effect that the members of the committee should be selected by the respective State delegations.

Adjourned.

As per adjournment, the association was called to order April 30th, at 10 a. m.

After some local business, the amendment calling for the election by each section of its own officers, was called up, discussed, and laid over till next year.

Dr. N. S. Davis now presented the report of the standing committee on Meteorological Conditions, and their relations to prevalence of disease. This report was received and adopted.

Dr. N. S. Davis also presented the report on collective investigation of disease in co-operation with the committee of the British Medical Association. This report showed that special investigations of disease were going on in nearly all European countries, India, United States, and South America. It was recommended that the work of the committee be continued. Granted.

Dr. Davis also reported in behalf of a special committee on explanatory declarations, concerning the proper interpretation of the Code of Ethics, appointed at the last meeting of the association, as follows:

Whereas, Persistent misrepresentations have been made, and are still being made, concerning certain provisions of the Code of Ethics of this association, by which many in the community, and some even in the ranks of the profession, are led to believe those provisions exclude persons from professional recognition simply because of differences of opinions or doctrine; therefore,

Resolved, That clause first, article IV, in the National Code of Ethics, is not to be interpreted as excluding from professional fellowship, on the ground of differences in doctrine, or belief, those who in other respects are entitled to be members of the regular medical profession. Neither is there any

other article or clause of the said Code of Ethics that interferes with the exercise of the most perfect liberty of individual opinion and practice.

Resolved, That it constitutes a voluntary disconnection or withdrawal from the medical profession proper, to assume a name indicating to the public sectarian, or exclusive system of practice, or to belong to an association or party antagonistic to the general medical profession.

Resolved, That there is no provision in the National Code of Medical Ethics in any wise inconsistent with the broadest dictates of humanity, and that the article of the Code which relates to consultations cannot be correctly interpreted as interdicting, under any circumstances, the rendering of professional services whenever there is pressing or immediate need of them. On the contrary, to meet the emergencies occasioned by disease or accident, and to give the helping hand to the distressed without unnecessary delay, is a duty fully enjoined on every member of the profession, both by the letter and the spirit of the entire code.

But no such emergencies or circumstances can make it necessary or proper to enter the formal professional consultations with those who have voluntarily disconnected themselves from the medical profession, in the manner indicated by the preceding resolution.

These resolutions were signed by the entire committee, and on motion, were unanimously adopted.

It was also ordered that these resolutions be published hereafter in connection with the Code of Ethics.

By request, the names of the new members of the International Medical Congress Committee were now read in full.

The address on Surgery was now delivered by the chairman, Dr. Duncan Eve, of Nashville.

By request, the address of the chairman of the section on State Medicine was referred to the publication committee without reading.

The treasurer's report showed the receipts for the year to have been seventeen thousand and ninety-three dollars. The balance in the treasury, nine hundred and thirty-two dollars.

The Board of Trustees, of the *Journal* of the Association, reported by their chairman, Dr. J. M. Toner. The report showed that all bills of the *Journal* had been paid in full, and the Association still had a balance to its

credit in the bank. It had also a considerable number of bills due for subscription and advertising assets. The receipts for the past year being greater than the first one, a corresponding increase has been made in the amount paid for editorial work. As a result, the *Journal* has improved, as is apparent to all readers. Finally, the Board was unable, under all the circumstances, to obtain the services of a managing editor to succeed Dr. Davis; hence, they unanimously requested Dr. Davis to continue his duties as formerly. This he consented to do.

A movement to have the Association recommend to the several States the establishment of independent boards of examiners was adopted by the Association.

It was decided to support the movement to erect in Washington a statue to Dr. Benjamin Rush.

The Committee on Nominations reported as officers for the coming year:

President—Dr. Wm. Brodie, Michigan.

First Vice-President—Dr. Samuel Long, Louisiana.

Second Vice-President—A. Y. P. Garnett, Washington.

Third Vice-President—Charles Alexander, Wisconsin.

Fourth Vice-President—W. F. Peck, Iowa.

Permanent Secretary—Wm. B. Atkinson, Philadelphia.

Treasurer—Dr. Richard J. Dunglison, lock box 1274, Philadelphia, Pa.

Librarian—C. H. A. Kleinschmidt, Washington, D. C.

Officers of Sections: Section on Practice of Medicine, Materia Medica and Physiology—Chairman: J. T. Whittaker, Cincinnati O.; Secretary: B. L. Coleman, Lexington, Ky.

Section on Obstetrics and Diseases of Women—Chairman: S. C. Gordon, Portland Me.; Secretary: Dr. Paine, Texas.

Section on Surgery and Anatomy—Chairman: N. Senn, Milwaukee, Wis.; Secretary: H. H. Mudd, St. Louis, Mo.

Section on State Medicine—Chairman: John Rauch, Springfield, Ill.; Secretary: F. E. Daniel, Austin, Texas.

Section on Ophthalmology, Otology and Laryngology—Chairman: Eugene Smith, Detroit, Mich.; Secretary: J. F. Fulton, St. Paul, Minn.

Section on Diseases of Children—Chairman: W. D. Haggard, Nashville, Tenn.; Secretary: W. B. Lawrence, Batesville, Ark.

Section on Oral and Dental Surgery—

Chairman: John S. Marshall, Chicago, Ill.; Secretary: A. E. Baldwin, Chicago, Ill.

Judicial Council—R. A. Kinlock, South Carolina; D. D. Sanders, Tennessee; T. G. Richardson, Louisiana; G. A. Ketchum, Alabama; G. Bird, West Virginia; J. M. Toner, District of Columbia; A. M. Pollock, Pennsylvania.

The place of next meeting—St. Louis, Mo., on the first Tuesday in May, 1886.

Chairman of Committee of Arrangements—Dr. Le Grand Atwood, St. Louis, Mo.

Assistant Secretary—Wm. C. Glasgow, St. Louis, Mo.

To fill vacancy in Judicial Council—Dr. J. K. Bartlett, Wisconsin.

For Trustees of the Journal of the Association—Drs. E. M. Moore, Rochester, N. Y.; J. M. Toner, District of Columbia, and J. H. Hollister, Chicago, Ill.

Adjourned.

MAY 1, 1885.

Pursuant to adjournment, the Association was called to order at 10:00 a. m.

On motion it was resolved that the committee appointed, in pursuance of a resolution adopted by the Association April 30th, 1885, to constitute an addition to the original committee of seven, previously appointed to invite and make arrangements for the meeting of the International Medical Congress, to be held in Washington, D. C., in 1887, be and the same committee is hereby authorized and empowered to select a chairman and a secretary, and to fill all vacancies that may occur by death or inability to attend the committee meetings, and to appoint the officers of the Congress.

On motion a committee of three was appointed to devise a system of awarding honors to those who may desire to present papers for prizes of honor in the different sections of this Association. Said committee to report subsequently through the Association Journal.

Dr. J. A. White, of Virginia, read his address as Chairman of the Section of Ophthalmology, Otology and Laryngology. Dr. J. H. Pope, of Texas, read his address as Chairman of the Section on Diseases of Children. The address of the Chairman of the Section on Oral and Dental Surgery, in the absence of the chairman, was referred to the Publication Committee.

Dr. Quinby, in behalf of the Committee appointed to report upon the President's suggestion respecting forensic medicine, reported

that this branch should be added to the Section on Oral and Dental Surgery. This being in the nature of an amendment to the by-laws of the Association, lies over to next year.

As Chairman of the Necrological Committee, Dr. J. M. Toner reported that his reports had been published in the Association Journal.

On motion the proposition to divide the Section on Ophthalmology, Otology and Laryngology, was laid upon the table.

The other proposed amendments to the by-laws of the Association were laid upon the table.

The customary vote of thanks was given to all who had aided to render the meetings pleasant and profitable to the Association.

The President-elect, Dr. Brodie, was now conducted to the chair and formally inducted into the duties of his office.

The President now declared the meeting adjourned.

Proceedings of the Wayne County Medical Society.

DETROIT, April 23, 1885.

The Wayne County Medical Society convened this evening in regular session, with the president, C. C. Yemans in the chair.

Dr. Hal C. Wyman: I desire to make a brief report of a case that possesses interest. Mrs. W., primipara, æt 36 years, first noticed tumor in abdomen four years ago. Since then it has gradually enlarged. I examined her, and found a tympanitic corona extending from epigastric region into either flank. Hypogastric region was occupied by a dome-shaped non-fluctuating mass, dull on percussion like a gravid uterus at full term. Per vaginam no uterus could be reached by the fingers. The vagina was pulled up behind the symphysis pubis so far that a sound passed in a distance of nine inches. Diagnosis, fibroid of uterus. The patient suffered great pain for a week before, during and after each menstrual epoch so that she enjoyed only one week of tolerable comfort between the periods. Menstruation scanty; great œdema of lower extremities. She desired an operation, saying she would rather die than live in such misery. Yesterday morning with the assistance of Drs. Clark, Jenks, Mulheron and Owen, I opened the abdomen with the object of removing the tumor if practicable. Owing to extensive adhesion to the rectum, bladder, ureters and broad liga-

ments and extensive vascularity this was found impracticable. The few vessels that were ruptured by manipulation were ligated with fish gut ligatures, and the abdomen closed with interrupted sutures.

Ligation of the uterine plexus of vessels was not practicable, and Tait's operation would have resulted in death from hæmorrhage. The tumor was sessile—a rather rare occurrence. Thirty hours after the operation the pulse was 100 and the temperature 99.5° Fah.

Saw a case several years ago in which the womb was drawn high up; there was no unusual difficulty in removing it.

Dr. Clarke: A carpenter, aged 40 years, while carrying boards felt pain in abdomen, believed to be due to bladder trouble. Some time after a tumor 1½ to 2 inches in diameter, freely movable, and rapidly growing, was detected in the right inguinal region. Handling caused much pain. A few weeks later the tumor was fixed. Several physicians have examined it and the opinion is strongly in favor of cancer. After one examination there was very free hæmorrhage from the bowels, causing very great prostration.

Dr. Noyes saw the patient soon after the hæmorrhage. The prostration was great, and the tumor, which is probably malignant, involving the mesentary, well-defined.

Dr. Wyman: It is remarkable this tumor should change its location so much.

R. M. Reynolds, by means of microscopes, exhibited a great variety of bacilli. Specimens were shown from the cutaneous eruption and from the mouth of a patient present. Both presented abundance of bacteria of the same varieties—the mouth several spirillum which are rather rare.

Careful examination of diphtheritic membrane revealed numerous bacilli, but none but what may be found in the mouth of any healthy person. Alcohol kills these bacilli.

W. H. ROUSE, M.D., Ph. C.,

Secretary.

Michigan State Board of Health.

[Reported for the DETROIT LANCET.]

The annual meeting of the Michigan State Board of Health was held at its office in Lansing, Mich., April 14, 1885.

The members present were John Avery, M. D., president; Arthur Hazelwood, M. D., C. V. Tyler, M. D., Prof. V. C. Vaughan, M. D., and Henry B. Baker, M. D., secretary.

This being the annual meeting, the presi-

dent's address was the first order of business. The president said that he had prepared no formal address. He thanked the members for the many courtesies shown him during his administration. He had no change of policy to recommend to the board: no marked change, he thought, is desirable. The work is well understood, and is in a satisfactory condition. The board must be governed somewhat by emergencies, as they arise. He could congratulate the board on what it had achieved. He thought it would be wise to continue holding sanitary conventions in different places in the State. He spoke of the probable advent of Asiatic cholera, and thought it might tax the board to its utmost. The board had done all it could to prepare to resist the disease, but should be ready for further action. If the bill before the legislature becomes a law, the duties as well as the powers of the State Board of Health, to prevent and restrict that disease will be increased. It would be desirable to continue to advise police regulations in cities, adapted to preventing unsanitary conditions, and the introduction or spread of cholera; and the health officers of cities, villages and townships of the State, especially as they are just now being changed—many being entirely new in that office—should be instructed in regard to their duties.

The secretary read a report of the work of the office during the past quarter. Of the 760 pages of copied letters sent out, 153 pages were modified circular letters to local health officers, in regard to prompt action to restrict contagious diseases. In connection with those, about ten thousand copies of the documents on the restriction and prevention of certain contagious diseases, and on the duties of health officers, have been sent to health officers for distribution to neighbors of families in which such contagious diseases have been reported. Since the last meeting of the board, the outbreak of small-pox, at South Boardman, had been suppressed. During the past quarter, there had been one case of small-pox at East Saginaw, two cases in Grand Rapids (confined to one house), the first of which was a commercial traveler, who thinks he was exposed on the train between Boston and Grand Rapids. About the time he was exposed it is known that a man had passed through Michigan, on the Michigan Central railroad, from Ontario to Chicago, *en route* for Manitoba. At Battle Creek there have been four cases with one death from small-pox, the contagium of which is supposed

to have come from a brakeman on the Chicago and Grand Trunk railroad, who stopped with a family in Battle Creek while he was slightly sick, and who thinks he contracted the disease on the train near Chicago. Two members of this family in Battle Creek visited friends in Bellevue, in Eaton county, and small-pox broke out in the family in which they stopped. Five cases and one death have occurred there; but thus far the disease at Bellevue has been confined to the one family. All the members of the family were vaccinated with virus on points from Fond du Lac, Wisconsin, as soon as it was known they had been exposed; but in three cases the vaccination did not work. In one case in which the vaccination worked, the person has shown no symptoms of the disease.

At the last meeting of the board, the subject of proposed legislation relative to diseased animals, and relative to a standard for milk, had been referred to the committee on legislation, and diseases of animals, jointly. The secretary reported that considerable time and care had been devoted to the perfecting of three bills relating to those subjects, which had been introduced into the house of representatives this session.

DANGEROUS ILLUMINATING OILS.

The secretary reported that during this session of the legislature there had been considerable lobbying to get the legislature to lower the standard oil test for dangerous oils, and to do away with the use of the tester adopted and recommended by this board. The claim of the lobbyist, who came to this office, was that the change was wanted in the interests of manufacturers of small quantities of oil, who, he claimed, could not now compete with the Standard Oil Company. Just how lowering the test would favor those particular oil manufacturers more than it would the Standard Oil Company, he did not make clear. It has been rumored here that the reason for changing from the tester now used, was to enable a dealer in a patent apparatus to sell his tester; but as this change was advocated by the same person who is laboring for a lowering of the test, it seems more reasonable to believe that the main reason is that the proposed apparatus does not detect the explosive vapor at so low a degree of temperature as does the present tester. From experiments it seems that simply by the proposed change in the tester the standard would be lowered about ten degrees. A committee was appointed by the sanitary convention,

held at Lansing, March 19 and 20, to consider this subject. The committee consisted of Frank Wells (ex-president of the Michigan Pharmaceutical Association), chairman; H. D. Bartholomew, C. E. (ex-city engineer); and Professor David Howell, superintendent Lansing city schools. April 2 this committee went before the senate committee on State affairs, and gave a verbal account of the results of their investigation, which was, in brief, that the test ought not to be lowered; that the "Foster cup" was unreliable, and ought not to be substituted for the Michigan State Board of Health tester; that if substituted for the Michigan State Board of Health tester, it was equivalent to lowering the test by about ten degrees.

By a vote of the board, this report concerning illuminating oils was ordered published, together with a resolution to the effect that there is not now sufficient evidence of the safety of such illuminating oils to warrant the lowering of the test now required for illuminating oils in this State. This resolution was adopted unanimously.

The secretary read the report to this board by Surgeon George M. Sternberg, U. S. Army, now at Johns Hopkins University, on his experiments on lower animals in feeding and in making injections of culture-fluids of poisonous cheese with the view of learning the nature and source of the poison.

Dr. Vaughan made a verbal report of his chemical experiments with poisonous cheese. He had certainly secured in a crystalline form a small quantity of one poison from poisonous cheese which would produce in man symptoms common to cheese-poisoning. There might be other poisons in poisonous cheese. He had not yet fully studied the poison he had obtained. It gave reactions like those of a ptomaine. It was probable, he thought, that butyric acid had something to do with the sickness caused by cheese; there are different kinds of butyric acid, and the absence of the odor of rancid butter would not prove the absence of butyric acid.

The subject of sanitary surveys of premises in cities and villages was thoroughly discussed. It was thought best that the blanks used should be uniform, but that each city or village should provide its own blanks. The committee was directed to make a sample blank to be recommended for such work, and be sent with a resolution which was adopted as follows:

Resolved, That the Michigan State Board of

Health earnestly recommends to the boards of health of the cities and villages in Michigan that they make a sanitary survey of the territory under their jurisdiction, on blanks of which a sample is sent herewith; and to adopt such measures as the sanitary surveys may prove to be necessary to place the cities and villages in a good sanitary condition.

Upon ballot for president of the board for the ensuing term of two years, Dr. John Avery, of Greenville, was re-elected.

It was decided to demand from health officers of all villages weekly reports of sickness under their observation.

Under the law requiring the approval by this board of text-books on physiology and hygiene and the effects of alcohol, etc., before they are used in the schools of the state, the board approved the following named book:

"Elementary Pathology and Hygiene.—The Human Body and Its Health. A text-book for schools, having special reference, etc." By William Thayer Smith, M. D.

The following named books were conditionally approved for use in the schools, with the qualification that they contain errors which should be corrected:

"Practical Work in the School Room. Part 1. The Human Body." By Sarah F. Buckelew and Margaret Lewis.

"The Essentials of Anatomy, Physiology, and Hygiene. A text-book for Schools and Academies." By Roger S. Tracy, M. D.

Dr. Vaughan reported that he had attended the meeting of the State Dairyman's Association, at Grand Rapids, as a delegate of the Board, and talked to the meeting on the subject of cheese-poisoning, especially in regard to his discovery of the poison.

Dr. Vaughan also gave an account of the work of the committee on disinfectants, appointed by the American Public Health Association. He is a member of the committee, and as such has done considerable work, and has attended a meeting of the committee in Baltimore. He thought the report of the committee when published in full would be a very valuable document in practical public health work. The preliminary report of the committee is just published.

HENRY B. BAKER,

Secretary.

LANSING.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The Late Meeting of the American Medical Association.

As will be seen elsewhere, the meetings of the general body were entirely decorous. The only time when matters waxed warm was during the discussion of the report of the committee on the International Medical Congress. In fact this was one of the most important topics of the general sessions. As far as we can gather the truth in the premises, there was a misunderstanding between the general mass of the Association and the gentlemen composing the committee appointed by the Association, to invite this Congress to America. Plainly the Association generally understood that this committee appointed by them, and whose expenses it paid, was its committee. On the other hand, this committee understood that it was a committee entirely independent of the American Medical Association. To this divergence of understanding all present complications are due. Had the committee understood that its actions must needs be reviewed and approved or rejected by the Association we doubt whether it would have solicited the task at the hands of the Association. On the other hand, had the Association supposed it was creating a committee to use its name, its money and its credit, without owing any allegiance to the Association, we doubt whether it would have been inclined to appoint the committee. In a former issue we called attention to certain peculiar features of the appointments to office, as exhibited in the printed circular of the committee. These we find were noticed and commented upon by others. In addition, the appointment of new code men to prominent offices in the organization has created wide dissatisfaction. It will be remembered that the Association appointed a new Committee of thirty-eight to work with the existing committee in recasting such portion of the work thus far done as cannot consistently be retained.

For ourselves, we think it unfortunate that these gentlemen desiring to have an International Medical Congress held in America should have gone about it in a manner that has led to such wide misunderstanding. Had they, upon their own responsibility, invited the International Medical Congress, they then

could have appointed to office whom they pleased, and they could then have invited as members whom they pleased, and there would have been none to gainsay. Or, having sought the name, influence, and financial support of the American Medical Association, had they appointed men eligible to membership in this body, and reported their work to this body for approval before taking final action upon the same, the Association would undoubtedly have confirmed their work and all would have gone on smoothly. It is certainly to be hoped that there may be still found a supreme authority under which both of these committees can and will work.

Now that the blunder has been made it only remains to make the best of it in such a manner as will make the Congress a grand success.

The Association *Journal* made a showing in all respects extremely creditable to all concerned. Financially it has been so managed that it has spent no more money than it received. Its management refused to listen to that policy which would have hopelessly involved it in debt. It was believed that if only it could be kept from debt it would grow naturally year by year. Even its worst enemies and most captious critics acknowledge that it has greatly improved during the past year. As more men can be paid to work on it, so will its columns gain in interest and power. If all subscribers paid up their dues promptly, the management could do still better. The Association saw more clearly than ever before the limitations under which this great enterprise is being carried forward, and the grand future for it if only its management be kept stable. For the present it is located in Chicago, and its editor is Dr. N. S. Davis. To his self-sacrificing labor and conservatism its present position is largely due. We hope that he may be induced to remain long enough in this position to enable him to exhibit to the medical profession the latest and best work of a long life devoted to the interests of the profession.

The general addresses were good. The meetings of the sections were uneven in their interest. Some were excellent and some were indifferent, and some were poor. This is not as it should be. There is no reason why each one of these sections should not be a credit to the branches of medical science to which they are devoted. But to accomplish this some one person must take a positive interest in the development of each meeting. He must see that subjects are pre-

sented by persons fitted to do so, and that discussions are had upon the same by persons selected before the meeting. To meet this end it strikes us that the secretary of each section should be permanent, and upon him be placed the duties indicated.

As to attendance, it is claimed that nearly eight hundred were present. Whether those were the best in the medical profession or not we do not say. But they did constitute the only representative body of medical men in the United States which holds annual meetings. All sections were represented, and all grades of ability. The meetings are just what the profession make them. Let none criticise too harshly who stays always at home and gives over into the hands of others this work of harmonizing the entire medical profession of this vast continent.

The numbers in actual attendance at one of these meetings makes less difference with the funds of the Association since the *Journal* was started. Experience shows that most will keep up their permanent membership in order to get the *Journal* regularly. In still another way the Association is growing. We refer to the possibility of any person in good standing in a medical society recognized by the Association becoming a member of the Association by sending his name endorsed by the president and secretary of his society, with five dollars, to the treasurer of the Association, Dr. Rich. J. Dunglison, of Philadelphia. It is to be hoped that in this way whole societies will be induced to join the American Medical Association. Besides the membership, they will get an excellent medical weekly, and become in a more real sense active members of the organized medical profession of the United States.

The work of these sections we shall present from time to time in so far as it adds to our knowledge.

Should Physicians Know the Price of Drugs?

It would seem at first thought that it were useless for the physician to burden his mind with the prices of the drugs he prescribes. The details of medicine and surgery are so vast that probably no mind at the present day is sufficiently capacious to contain even a large portion of them. Such being the case, why should the physician burden his mind with the prices of drugs? In reply to this query, we quote an incident from the *Midland Medical Miscellany*. "A certain distinguished English physician having heard that cocaine

would afford relief from pain when applied locally, wrote a prescription for it. It was ordered to be applied to the part on cotton wool saturated with it. When the druggist read the prescription, he saw that it would cost the patient \$32.50. Of course he had the sense to see the doctor and explain matters. Morphine was substituted, and all parties content." This is a simple illustration of the fact that, through ignorance of the prices current, physicians order drugs whose cost is relatively or absolutely enormous. When patients are wealthy, no hardship is inflicted. But even then there is a complaint that the medicines prescribed by such a doctor cost a mint of money. From this cause alone, we have known many instances in which wealthy families have employed homeopathic physicians, because, forsooth, they did not incur any expensive drug bills.

Of course, with the poor costly medicines are often entirely out of the reach of the means of the patient. People of moderate circumstances dislike the incurring of any needless expense, and hence look to the drug bills as a portion of the doctor's visits. Especially is this true when they come to compare the regular with the homeopath. Doctor and medicine of one set of men are balanced against doctor and medicine of the other set. This being so, there is a balance probably in favor of the homeopaths as well as a balance in their own pockets. The druggist has but a small amount usually. The doctor makes more visits, and from a financial standpoint the patient seems to be more out of pocket when he employs a regular.

We do not suppose that it is claimed by any that a doctor should keep in mind the actual prices of any drugs, but it is possible for him to keep the run, in a general way, of the cost of all the medicines he prescribes. Having this knowledge, it is possible for him to prescribe so that the patient shall get the most for his money, and so have no ground for complaint.

1. There are patients who are ready and willing to pay for the most elegant medicines, dispensed in the most agreeable manner, and it is proper and right that the doctor should know how to meet their desires. Modern pharmacy has placed at his disposal the means of gratifying very fastidious tastes, and of administering medicines as pleasant as those of the homeopath, and entirely efficacious.

2. There is a considerable class of very rich people, who do not desire to spend one cent more than is needful to afford relief from

existing ailments. Dealing with these the doctor will be wise who is posted respecting the probable cost of his prescriptions. He will be wise for his own credit and for the satisfaction he desires to afford his clients, when he reduces the cost of his remedies to a minimum consistent with proper consideration of his patient's state.

3. There is a very large middle class, who have not the money to spend in expensive medicines, when less expensive ones will cure them quite as soon. Here the doctor's knowledge of the prices will stand him in good stead.

4. There are the poor. Here often the doctor has to furnish both service and medicine. If he furnishes the medicine, he will need no caution to beware of expensive drugs, etc. But the same fact needs to be borne in mind when prescribing for those who will get their medicines at the drug store.

5. If the doctor knows approximately the price of drugs, he will be able more fully to do by his patients as he would have them do by him were they to change places. Only thus will he really have fully in hand the implements of his daily work, and be able to so employ them as to do the greatest amount of good with the least harm and discomfort.

But how shall this knowledge be obtained? Well, if a medical student during his pupilage should spend six months or more in a drug store as clerk, he would get what he needs. If all must be done after graduation, much can be learned at the friendly drug store, from the list of prices current. An occasional study of these will do much to keep every doctor sufficiently well posted for his actual needs.

Of course what we have said has no application to such unfortunate doctors as supply their own medicines, but only for such as write prescriptions.

How Does American Journalism Aid the Development of the Medical Profession?

The *New York Medical Journal* says that "it regards the great distinctive service of American medical journalism as shown mainly in its counteracting influence in removing the pedantry sown in the medical colleges, and encouraging the expression of original thought in young men." Surely, it were a great thing to remove the stupidity engendered by medical schools, and to draw forth the powers of original thought which are dormant in the young doctor. Of the truth

of this view we have no question, nor can any editor of any experience or success fail to have many personal experiences in this sort of work. In the very best sense of that term the medical editor is a teacher, and this, too, in causing others to work for the common good. The education follows from the efforts of the young doctor to learn something of profit or interest to the profession, and then place this before the profession in the most attractive shape. The medical editor, in order to make his journal a success, is compelled to get the best work expressed in the best way. Most of the older members of the profession have never learned to write, and as they become burdened with the cares of a large business, it becomes impossible for them to learn the art of writing. Much they possess of positive value to the profession, but from the defect of not being able to write with comfort, their knowledge dies with them. The medical editor can get little help from them. There are a considerable number of the members of the medical profession who could not write a decent article, if they had any distinct ideas to put in it. Obviously, the medical editor can do nothing with this class. But there is another class of doctors, who have the general culture and the brains, but are too modest to think of writing for the benefit of their seniors. From this class the medical editor draws most of his working co-laborers. By encouragement, by personal solicitation, by aid in matters of reference, by stimuli, of ambition, of professional pride, by appealing to the sense of his obligations to do for the general profession that which lies in his power, many of this class are brought into active service in medical journalism. Having encouraged to habit of expression, the editor stimulates the habit of original research. Of course, different individuals will be stimulated in different directions. So, at last, the editor will have writers in every portion of the field of the art and science of medical surgery. Hence, it comes about that the editor sends men to work with the microscope, in the chemical laboratory, in the pharmaceutical laboratory, in the physiological laboratory, in the anatomical room, in the hospital, in the dispensary, in the tomes of medical literature of every language, and of every age. In short, he has these men at work in every field, congenial to them, and such that they can reach it.

In a very real sense, an editor is like a captain of a ship; he shows his abilities not so much in what he does himself, as in what he

can get others to do. That there are not more really good medical journals, is due mainly to the fact that there are really few medical men having the power of getting others to work in the fields leading to medical journalism.

When a young doctor has begun to realize that he can talk to the entire medical profession, life and study takes an entirely new aspect. The day of small things is past, and the day of an enlarged and enlarging manhood has come to him. One who does realize this truth will never write a poor article for publication. The poor articles come from quite a different sort of men. These the medical editor gradually weeds out.

Of his direct and indirect influence upon the conduct of medical colleges, and upon medical societies, and medical publishers, writers of medical books, and the relations of medical men, we have not time to speak. But in all these things the medical journal is the means by which the process of both good and bad education goes forward. Out of all these educational processes the medical profession is slowly rising higher in its development.

To every young man who would make the most of his powers, we say: think, observe, and write for the medical press constantly. It may be that one article a year is all that any particular person can produce. It may be that longer time will be required, but whether the time be long or short, be sure to begin, and keep up the habit, of correct thinking, constant study, and correct and frequent writing.

Stupid Medical Societies—Their Reform.

The *Medical and Surgical Reporter* expresses its disgust with the meetings of some medical societies in emphatic terms. It says: "At a recent meeting of a very prominent medical society, 20 sleepy members were in attendance, and before the meeting was over some of these had slipped away. It is a rare sight to see the hall of any medical society respectably filled, unless it be on some occasion when a supper is to follow the meeting, and then the majority of the members come straggling in late. It was said by the chairman of the last meeting of the Pennsylvania State Medical Society, that the majority of the papers were unworthy to be listened to. Does not the character of the papers read account in a great measure for the emptiness of the seats? Many of the papers

read before the societies are mere rehashes, with no earthly use for their delivery save the author's thirst for notoriety."

The foregoing is not a very fascinating account of medical society meetings, including those of the American Medical Association. But that it expresses the truth respecting the meetings of most societies, there can be no doubt.

Beyond a doubt, the conduct of most medical societies is for obtaining by the few of some cheap notoriety. These few read papers, unworthy of a first course medical student, propound absurd theories without any basis in this world, or any other; occupy the time with matters of no general interest or importance simply that they may seem first.

Reform is called for from the top to the bottom of most general medical societies.

Any reform calls, first, for men who will take the trouble to inaugurate and carry out the proper measures. Are there in each society members possessing the brains, industry and back bone to do the required work? It must be remembered that a medical society meeting, in order to be successful, must be prepared with at least as much care and expenditure of work and skill as a first class dinner. Here unless all things are collected, cooked, and served in proper order, the dinner is a failure. Shall it be otherwise with an intellectual feast? The fact that persons come late, sleep during the meetings, or sit listless, simply proves beyond a doubt that a dinner suited to the needs of these persons has not been prepared, or that they are not hungry for this kind of diet. Most medical society meetings are wholly unprepared. No person has spent a day in the securing of proper papers, discussions, etc. In short, all things are haphazard. Then again, in the conduct of meetings there is often utter failure to keep each person in his proper place. What would be thought of the head of a dinner party who would permit two or three persons to eat the entire dinner? Equally hogish is it to permit two or three persons to take up all the time at a medical society meeting. That society will be the most satisfactory in the long run, which has no more members present than can be permitted to take part in the work of each meeting. This is shown in the work of the special societies. Those only come together who can and will contribute something to each meeting. There is no reason why all societies, in which medical and surgical studies are the end of the meeting, should not arrange matters so that all could

take a part in the papers or discussions. For instance, suppose the meeting was to continue two hours, and the membership present be twenty. Let the paper not exceed twenty minutes, and each speech not more than five minutes, and all will have a chance. Of course this supposes that the presiding officer will strictly enforce the rules, and let no one encroach upon the time of the other. When it is understood that time will be limited as indicated, each will train himself to say the most in the least time. The bore of medical societies is the fellow who takes up the most of the time saying nothing, simply because he is trying to make a pint of water fill a hog's head. "Let every person at a medical society have something to say, say it, and sit down." Were this rule adopted and enforced, all medical societies would be interesting, and all members interested to come early and stay late.

Who in his own society will at once set about this needed reform?

Miss Louisa M. Alcott's Experience With the "Mind Cure Craze."

At irregular intervals during all the historic past the "craze of mind cure" has taken possession of large numbers in various communities. During later decades this craze has taken the titles of the persons pushing the craze, as Mesmerism, Braidism, etc. Its subjects have been mostly females of a transcendental turn of mind—females who believe in homœopathy, spiritualism, etc. But we desire to present the experience of Miss Alcott as told by herself in the *Woman's Journal*.

She says: "Writer's cramp and an over-worked brain were the ills I hoped to mitigate by the new cure, of which marvelous accounts were given me. With a very earnest desire to make a fair trial I took about thirty treatments, finding it a very agreeable and interesting experience up to a certain point. No effect was felt except sleepiness for the first few times; then mesmeric sensations occasionally came, sunshine in the head, a sense of walking on air, and slight trances, when it was impossible to stir for a few moments. Much cheerful conversation, the society of an agreeable person, and the hope that 'springs eternal in the human breast,' made these earlier weeks very pleasant. But when bodily pain was not alleviated and instinct warned that something was wrong, I began to ques-

tion and doubt the theory which claimed to cure cancers, and yet could not help a headache. I made myself as passive as a reasonable being can, hoping that since lunatics and children were helped, I also could be if I gave up trying to see, believe or understand. But when thirty treatments left the arm no better and the head much worse, I dared lose no more time, and returned to homœopathy and massage, from which I had been lured by the hope of finding a short and easy way to undo in a month the over-work of twenty years.

"This is my experience, and many others who have made the same experiment tell the same story, while the fabulous cases reported to me proved to be failures like my own when investigated.

"My opinion of the matter is that, being founded upon a fact which no one denies, namely, the power of mind over body, there is truth in it, and help if it is not overdone, and more claimed for it than is due.

"Mesmerism, unconsciously used, perhaps does much; curiosity, the love of the miraculous, the hope of health, and more than all, the yearning of weary spirits for divine support, lends this craze its charm, and attracts the crowd of sufferers who fill the rooms and pockets of persons who profess the healing gift."

We have no doubt that Miss Alcott has fairly stated the essential facts respecting the results of this mind cure craze. The rational physician does not doubt for an instant that there is great power in certain conditions in the use of the mind to relieve disease. But he is quite as certain that mesmerism as such, and all its allies are on the whole harmful to all who come under their influence.

We have quoted this story of Miss Alcott's for the purpose not only of directing attention to the new craze of Boston, but also to the value of the mind as a therapeutic agent.

A Fearful Practical Lesson on the Relations of Dirt to Death.

The town of Plymouth, Pa., has been the scene of an epidemic of typhoid fever, fearful in the extreme. Many also have been attacked with malarial poison. Out of a population of some eight thousand, about one-third have suffered from the disease, many dying.

The local physicians have been unable to attend the sick, and so volunteers have been called for. Hospital accommodations have been provided, and proper measures for suitable treatment. The origin of the epidemic

is also clear. The town is situated on the alluvial soil of hills, which slope towards the Susquehanna river. The water supply is from reservoirs made by damming a brook running through the town. This water has become polluted to an extreme degree. Prof. R. C. Kedzie, of the Michigan State Agricultural College, has made a careful examination of this water. He reports it the very worst drinking water he ever examined.

The town has no sewerage system. Hence, all the water polluted by being used for household and other purposes, is left to find its own way through the soil to the river. The population, also, is so full of ignorance that it paid no attention to sanitary laws. As to the origin of the epidemic in this particular form, it seems to have been imported from Philadelphia. A person visiting that city contracted typhoid fever. In March, after his return to Plymouth, the disease broke out. While sick, he was in a house some forty feet above the banks of the brook, and between the third and fourth reservoirs. It seems that there are quite a number of these reservoirs, formed by damming the brook on its way through the town. From this water is distributed by pipes to most of the town.

The excreta from this typhoid fever patient were carried by rains, melting snow, etc., into the brook, and so to the reservoir, whence it was widely distributed. In support of this view is adduced the fact that many of the families obtaining water from wells were not attacked by the disease.

Post mortem examinations made by Dr. E. O. Shakespere, of Philadelphia, establish the fact that the disease is typhoid fever. That it could be introduced and spread in the manner described all admit. Such an epidemic would have been impossible had the town been simply *clean*. The gospel of cleanliness needs far more prophets ere towns such as Plymouth become free from the ravages of epidemics caused in the same way as this. This is unusual, simply from its vast proportions.

Annual Meeting of American Medical Editors.

This meeting was held the evening preceding the opening of the sessions of the American Medical Association, in Tulane hall, New Orleans. President H. O. Marcy, of Massachusetts, gave an excellent address upon the regulation of the practice of medicine. He was followed by a very entertaining paper from Dr. Daniel, of Texas, upon the legal

status of the medical profession of Texas. These papers being long, occupied the entire evening. At their close, Dr. H. O. Walker, of Michigan, was elected president; Dr. F. L. Sims, of Tennessee, vice-president; and Dr. F. E. Daniel, of Austin, Texas, secretary. A good audience was present to hear the exercises, but there was no space left for discussion of the questions proposed. Dr. Walker, as secretary, had taken considerable pains to make the meeting known to the medical men in the city. True, relatively few medical editors were present. This is to be regretted. Doubtless, one reason for this is the fact that few feel able to leave their work long enough to attend these meetings. We shall hope that under the new management of the coming year farther progress may be made in getting a better organization.

Memoranda.

Denver Medical College graduated five students.

The *Denver Medical Journal* reports: "Plenty of small-pox in Denver."

The Woman's Medical College of Baltimore graduated on May 1 four persons.

The Medical Department of the University of Pennsylvania graduated 108 students on May 1st.

According to Dr. Bartholow, the active principle of Golden-seal is the white alkaloid, hydrastine.

The *Atlanta Medical Journal* has become the official organ of the Georgia State Medical Society.

The College of Physicians and Surgeons of New York graduated one hundred and thirty-four candidates.

The medical college "craze" in Colorado has subsided for the present, so says the *Denver Med. Jour.*

In Paris, every one studies a specialty, but to be regarded as a specialist is an unpardonable professional sin.

The British Gynæcological Society announces the early appearance of "*The British Journal of Gynæcology*."

Dr. Thom, of Turkey, reports that he saw a man eat at one meal 45 pounds of solid food. The man still lives.

Dr. LeGrand Atwood withdraws from the editorship of the *St. Louis Medical Journal*. His successor is not yet announced.

The Northwestern Medical College at St. Joseph, Mo., has been cremated. It is said that it will rise from its ashes, purified by fire better than ever.

Dr. Jones, of New Orleans, says that in the Mississippi valley malaria slays more victims than any other disease not excepting yellow fever, or consumption.

At the McLean Insane Asylum, at Somerville, Mass., the average cost per week of each patient last year was sixteen dollars. The asylum has a rich endowment.

Dr. A. Alt in the *American Ophthalmological Journal* reports a death following a cataract operation. The period between the operation and death was twelve days.

Dr. E. T. Ely, of New York, died April 18th. His manhood was larger than his profession, and endeared him to his professional acquaintance, as well as to his patients.

Dr. J. H. Logan died March 29. He had been professor of chemistry in the Atlanta Medical College, and editor of the *Atlanta Medical Journal*. A good man has passed away.

Dr. Doremus, of New York, has but his right arm and yet is said to make twenty-five thousand dollars per year from his chemical work. What might he not make had he two arms?

The *American Journal of Neurology and Psychiatry* is discontinued at the end of its third volume. Its fate is that of many special journals. We regret to lose it, as it was well conducted.

Dr. Carter, of the Baltimore Health Department, says that the deaths from cancer from 1830 to 1874 were only 1,116, while for the ten years since 1874 the mortality has been 1,581.

The treasurer of the Texas State Medical Society says he hopes the day will soon come when that society will be able to pay the expenses of its delegate to the American Medical Association.

Prof. Frederic Gustave Charles Henle died in Berlin May 18th. He was seventy-six years old. He is best known by his anatomi-

cal writings. Henle's tubes are known to all medical students.

The Fort Wayne Medical College reports the graduation of five students, the conferring of two honorary degrees, and of three *ad-eundum*. Thus, of ten diplomas granted, half were purely honorary.

Dr. Strong, in his report for 1884, says that little more than half of the known insane in Ohio are provided with asylum care. It is the same old story, too many insane for the asylums. What shall be done?

It is announced that the Post Graduate courses of the Jefferson Medical College and the University of Pennsylvania have been discontinued. This would seem to indicate that these courses did not pay.

Dr. Williams, in the *St. Louis Med. Jour.*, reports a case in which a severe iritis was relieved by a violent cholera morbus. A vigorous catharsis often turns the progress of acute iritis into the course of direct recovery.

Dr. Eddowes, in the *London Lancet*, vouches for the truth of the birth of a child weighing 22 pounds and two ounces. It measured in length 13 inches, and around the chest 14 inches. It was well developed and healthy.

We have received the first issue of the *Sanitary Monitor*, a monthly public health journal, edited and published in Richmond, Va., by Dr. J. F. Winn. Price, one dollar a year. Well got up, and worth twice the money.

Two hundred tents have been provided for the chronic insane, at the Insane Asylum, Binghamton, N. Y. It is believed that such an out-door life will be beneficial to them, as well as relieve the over-crowded asylum.

Dr. Panum, the distinguished Professor of Physiology in the University of Copenhagen is dead. It will be remembered that he presided over the meeting of the International Medical Congress which met in Copenhagen last year.

At the inquest of the first victim to the six days' New York roller skating match, the jury recommended the passage of a law prohibiting any exhibition by which one person should be kept on the floor longer than four hours.

"Cocaine muriate" manufactured by Glover

& Nicol, of this city, turns out to consist chiefly of carbonate of sodium. Thirty-five cents a grain seems a large price to pay for an article that ordinarily retails at 10 cents a pound.

It is believed that the confidence of the inhabitants of New York City in the integrity of their own senses, will be increased by the announcement of an investigating committee that they drink water contaminated with sewerage.

Dr. Roehr says that the ring of a button-hook constitutes a very convenient instrument for holding the eye steady while removing a foreign body from the cornea, or doing other operations in which it is desirable to keep the eye steady.

The medical society known as the College of Physicians of Philadelphia, has secured \$30,000 with which to erect a third story upon its building. The rapid growth of its library and the Mutter museum led to this enlargement.

Dr. Detmold, of New York, says that he has never seen the œdema over the anterior surface of the tibia, in cases of periostitis of that bone from syphilis, disappear. Hence, he regards this œdema as a characteristic mark of syphilis.

It is stated that in Russia more than 60 per cent. of the children die under five years; not more than half the males reach 35 years; and one third of these are unfit for military service, either from defective stature, or constitutional debility.

On April 14th, the printing establishment in which the journal of the American Medical Association is printed, was entirely destroyed by fire. The losses were not so serious but that they were so replaced that the journal was out nearly on time.

The *Polyclinic* thinks that the abuses in American medical colleges are: "Admission without proper qualification; want of supervision in the attendance of the pupil; defective laboratory and clinical training, and secret examinations for the degree."

The *Polyclinic* commends the great improvements made in the *Journal* of the American Medical Association during the past year. It does not think it wise for the *Journal* to attempt to procure the material and have its type-setting done under its immediate control.

It is stated that the Paris hospitals contain one bed for every 17 of her inhabitants. In London, England, the proportion is about one in 200. In Paris the people love to go to the hospitals when sick. In most other countries they prefer their homes, if homes they have.

Prof. Karl von Siebold died in Munich, April 7th, aged eighty-one years. As a physiologist and anatomist he has left a lasting remembrance in the pupils he has trained, in the papers he has published, and in the contributions made to the progress of these sciences.

The *N. Y. Med. Jour.* thinks that while the term Professor attached to a doctor's name has a given money value, the wide distribution of the honor has so narrowed that value that its possessors can scarcely allow their colleges to fall short of being self-sustaining.

Dr. Robert Tilley has resigned the editorship of the *Weekly Medical Review*. Hereafter the first part of this journal will have but one head. The last part continues to have Dr. Engleman at its head. The mutations of the editorship of this journal are of infinite variety.

On April 6th Mrs. Tom Thumb married an Italian dwarf of about her dimensions. A short time since at the New York Dime Museum a fat woman weighing 596 pounds married an "Albino." "What Shall the Harvest Be," was struck up by the band on the completion of the ceremony.

Mr. and Mrs. Astor have given the new Academy of Medicine a portrait of Dr. Fordyce Barker. It is said to be a fine work of art. The occasion of its presentation permitted Dr. Markoe to say some very pleasant things respecting Dr. Barker. Better to say them now than after he is dead.

New Orleans physicians affirm that quinine has no curative effect upon hæmorrhagic malaria. So far as chills are concerned quinine increases the congestion of the kidneys and produces greater hæmorrhage. The free use of calomel gives the best results in this form of malarial poisoning.

Prof. Jaksch, the great clinical teacher of the Prague medical school, on the 19th of March, celebrated the fiftieth anniversary of his medical career. On March 23d, Prof. Hyrti, of Vienna, celebrated his fiftieth an-

niversary of medical work. Prof. Hyrti is now 80 years old, and nearly blind.

Colored stockings as a cause of disease is announced. The *Berlin Wiener Medical Wochenschrift* reports a case of a young lady, aged 26, who was poisoned by wearing stockings colored with aniline red containing a large amount of arsenic. After the recognition of the cause, the lady finally recovered.

It is said that Dr. Koch picked up the idea of using the potato for his culture experiments, from seeing a fungus growth on the potato. He at once thought that disease germs might grow on a potato. So the potato was to him what the apple was to Newton. "Great minds run in the same channel."

At Breslau a midwife was recently condemned to six weeks imprisonment because she neglected to wash her hands in carbolic lotion immediately before commencing work in a case of confinement. The midwife said that she washed her hands in the carbolic wash before leaving her home. But this was declared unsatisfactory.

The Berlin correspondent of the *Brit. Med. Jour.* says that lately, in that city, a young lady called at a drug store and asked for some chlorate of potash as a gargle for a sore throat. She was told to take a teaspoonful from time to time. She took the powder instead of dissolving it in water, and died in five days from vomiting and asthenia.

Dr. Jacobi says that medical men could and should avoid the appearance in print of reports of striking cases or rare cases, which could not be of interest to the public at large, while they harmed the professional man who was thus held up to public view, to be talked of in the morning, to be smiled over in the afternoon, and to be forgotten with the new day.

The *New York Medical Journal* thinks that the management of the *Journal of the American Medical Association* has been judicious and creditable, and that it should be continued to be published in Chicago and edited on the same general principles that have guided it thus far. Any deviation from its present course it thinks unwise. Wise judgment, by one of the best of journalists.

Of *Virchow's Archives*, Virchow says on the completion of its hundredth volume: "Ger-

many possesses no other journal that affords, by its original treatise, so complete a survey of the course of development of medical science during its most critical period, none that has so directly taken a part in this course of development; in fine, none that unites in itself such an abundance of imperishable material.

The original drawings of Jæger's Atlas of the Diseases of the Fundus of the Eye, have been purchased for Dr. Norris, of Philadelphia for two hundred and fifty dollars. This is only a little more than ten dollars a sheet, not an extravagant price when it is known that a single sheet sometimes occupied Jæger for two hundred hours. Ten dollars for two hundred hours' work is but meagre compensation.

Dr. DeWolf says that from a sanitary stand point "Chicago is a clean city." To outsiders its dirty streets make it seem dirty. It has always seemed to us that Chicago's healthfulness was due almost wholly to the frequent and powerful winds which sweep over it from the northwest and from Lake Michigan. These atone for the foul drinking water, and the fouler air from the stock yards and open sewers, etc.

Dr. C. T. Williams says there are fifty establishments on the continent of Europe in which compressed air is used for the treatment of disease. These are made to accommodate from one to nine persons. While the air is kept compressed by steam, provision is made for the complete removal of all vitiated air, etc., all else that needs to be brought into the air chamber or taken from it during the stay of the patients therein. It is proposed thus to afford at the patient's home the benefits of all degrees of rarified or condensed air, such as is usually obtained at high or low altitudes.

The *N. Y. Med. Jour.* says that the majority of English and German graduates who come to America make but a poor show when they settle down in this country. It accords their failure to the lack of hard sense, by which they might adapt themselves to the lives and needs of the people among whom they settle. The average American graduate with far less book learning, gets most of the business, when brought into sharp competition. Undoubtedly, he knows his customers best, and so gets their trade. All this, in spite of the fact that the average medical school of this country is far below what it should be.

General Grant's doctors are having a hard time of it in the newspapers. How much better it would have been for them to have never begun the issue of bulletins—to have informed the family that such methods of communicating with the public were not wise. Had this been done, and the public notified in general terms that he was better or worse, as the case might have been, all this abuse at the hands of the secular press might have been avoided. But the gentlemen sending out these bulletins are reaping exactly what they have sown. Unfortunately the entire medical profession suffers in popular estimation for the mistakes of these few.

The New York correspondent of the *Peoria Med. Monthly* thinks the case of Gen. Grant an unfortunate one, for reasons aside from public consideration, in that it leads the masses to see in the medical attendants arbitrary designers, anxious to parade their names before the public. "It is a fact," he says, "that there are more interesting surgical operations at the New York Hospital than at any other in the city." "Physicians very frequently arrange that several shall occupy one office, holding their office hours so that only one shall be in the office, but that one shall be there all of the day." For matters of economy, this plan presents obvious advantages.

The *New York Medical Journal* in setting forth the real relations of gynæcologists, vigorously defends them from narrow education. It asks: "Who are our prominent gynæcologists—those in New York for example? Are they not men who have spent years in general practice before they gradually contracted their work within the limits of a specialty? The notion that they are necessarily ignorant of general medicine is controverted by the fact that no young man who aspires to follow their example is so foolish as to believe that he can attain to eminence as a specialist in diseases of women, until he has spent many years in general practice. Of those who start with the contrary idea, few are ever heard of again."

The Medical School of Minneapolis has entered upon a series of changes. First, it is unable to maintain its fine hospital. This spring the St. Paul members of the Faculty secured money with which to erect a building in St. Paul. They resigned from the Faculty intending to start an independent school. It now is announced that this resignation has been withdrawn, and the Minneapolis members are in-

vited to unite in establishing a school in St. Paul. The acceptance of this has not been announced. Those who have kept track of the medical schools of those cities will remember that St. Paul first started a medical school. Its location and surroundings were not all that could be desired. From these and other causes it languished. Now it looks like a return to the first location.

The *Weekly Drug News* of April 18th, reports a death from a druggist giving to a customer the wrong medicine. By this a baby 21 days old was given a six-grain Dovers powder, and died. The same journal for May 2d, reports the death of a physician at the hands of a druggist. It appears that the doctor went to a drug store to obtain some medicine for a patient, and there became involved in some controversy with the druggist, and was finally ejected from the store. During the ejection he fell and suffered a fracture of an arm and leg, and died therefrom. In our last issue we quoted a death, in Brooklyn, N. Y., due to a mistake of a druggist. It seems as if the druggists of that city had taken a contract to clean out the world, including a portion of the medical profession. It would appear as if the drug stores were a prevalent cause of death.

Editor's Book Table.

Ziemssen's Handbook of the Diseases of the Skin.*

This is a portly quarto volume of nearly seven hundred pages. It is issued as a present to the subscribers of Ziemssen's Cyclopædia of the Practice of Medicine. The reason why it was not published in connection with the issue of that work was that the gentleman to whom its preparation had been assigned, failed to prepare the text. Nor was this text prepared till late in last year. Finding that all their volumes were completed without this important class of diseases, Wm. Wood & Co. announced that when the text on skin diseases was prepared they would issue it in a separate volume and present it to each subscriber to Ziemssen's Cyclopædia.

*HANDBOOK OF THE DISEASES OF THE SKIN, Edited by H. V. Ziemssen, M.D. Illustrated with eighty wood engravings and color prints.

New York: William Wood & Company. 1885.
Cloth, pp. 658. Sent free to all subscribers to Ziemssen's Cyclopædia.

In accordance with this promise this volume lies before us and is being delivered to the subscribers for that work. The publishers desire all such subscribers to send them their names and addresses that the work may be forwarded to them. Certainly this is a very handsome and valuable volume that is thus presented to the patrons of this publishing firm. It is also one of the most extensive treatises on this subject ever issued to the general profession.

The anatomy and development of the skin are considered in the first sixty-six pages, by Dr. Paul G. Unna. Ziemssen follows with some six pages devoted to the physiology of the skin. These articles are the best that we have ever met on these subjects. Every practitioner will be interested and instructed by the careful reading of them. The latest researches and studies in respect to the separate diseases are quite fully and fairly presented. As a whole the work is a most valuable contribution to the literature of skin diseases. The plates are superior to those given in the *Encyclopædia* proper.

General Pathology and Therapeutics of the Skin are represented by the pen of Henrich Auspitz; Hypæmia, Anæmia and Hæmorrhages of the Skin, Chronic Deep Seated Inflammations and Neuroses of the Skin, by Prof. Ernest Schwimmer; Anomalies of the Sebaceous Glands and their Function, by Earnest Veiel; Acne Rosacea and Sychosis and Dermatitis Superficiales, by Dr. Th. Veiel; Acute Deep Spreading Inflammations; Morbid Changes of the Nail and its Bed; Neuroma. Adenoma, Epithelioma, Molluscum and Carcinoma of the Skin by Prof. E. Geber; Anomalies of the Color of the Skin, by E. Lesser; Anomalies of the Epidermis, by Dr. A. Weyl; Chronic Infectious Diseases of the Skin, by Prof. A. Neisser; Anomalies in the Growth and Color of the Hair, by Paul Michelson, M. D.; the Parasitic Diseases of the Skin, by A. Weyl, M. D., and Prof. E. Geber, M. D.; New Formations of the Skin, by Prof. E. Schwimmer and V. Babes, M. D.

The absorptive power of the skin is discussed quite fully. The superficial horny layer of the skin renders impermeable the skin except at the openings of the sweat glands and hair follicles. Wittich claims the existence of spaces between the cells of the horny layer, through which fluids, etc., can pass from the outside to the inside. These spaces, he says, are filled with granular cement substance, which constitutes the path of communication. Through this pass and

repass gases, and fluids until an equilibrium is established. According to his experiments, water applied to an uninjured skin is not absorbed. The gain in weight of the body by immersion in water is due to the inhibition of water by the epidermis. It is doubtful if simple tinctures are absorbed if simply brushed over the skin. Oils and ointments are absorbed through the open mouths of the ducts. Gases and substances which become volatile at a relatively low temperature pass through the skin with considerable readiness. Of course all substances dissolved in fats can be absorbed.

Regarding the relation of skin diseases to diseases of the nervous system there is very full discussion of the facts as now before the medical profession. He concludes thus: "Those skin diseases which, by their clinical symptoms, prove their origin from anatomically demonstrable nervous affections (central or peripheral neuritis), and they alone, must be differentiated from simple inflammation of the skin and the angioneuroses."

In the Therapeutics of Skin Diseases we find the following directions for beautifying the skin:

"A healthy integument is not necessarily beautiful. Even if all the requirements concerning diet, residence, atmospheric and climatic conditions, etc., are carried out, the complexion may be extremely bad. The general condition of health has no influence on the beauty of complexion, though it has upon the health of the skin. Cleanliness is a *sine qua non* of the beauty of the complexion, though it does not play a great part in the health of the skin. Water is serviceable to the skin only in moderation, and at moderate temperatures. Very warm or cold baths when used in excess, diminish the elasticity of the skin and the power of resistance to external irritants.

Distilled and soft water are more suitable for washing, and less irritating than hard water.

The hard soaps are usually preferable to the softer potash soaps for toilet purposes. The quality of soaps depends upon the quality of their constituents and the thoroughness of their saponification. Good soaps must not contain free alkali or any foreign irritating substance. The addition of moderate quantities of perfumes does not materially change the quality.

Simple, finely-ground powders, such as starch and magnesia, etc., are entirely innocuous and often act as a useful protection

against external irritants. Frequent application of alcohol abstracts the water from the skin, makes it dry and brittle, and impairs its nutrition. This is also true of glycerine. All toilet washes containing alcohol to any extent should be avoided. This is also true of such additions to washes as corrosive sublimate, mineral acids, certain metallic salts, etc.

Camphor acts simply as a bleaching powder. This is true of benzoic resin, sulphur flowers, and substances containing tannic acid.

The use of sweet-smelling oils and fats should be employed to a greater extent than is now done for toilet purposes.

This is particularly true with regard to the growth of the hair. The nutrition of the scalp should be increased by the rational application of fat (for example in the form of oil baths by means of the application, at night, of a sponge soaked in oil upon the scalp), and the greater use of simple pomades; this should be applied to the roots of the hair rather than the shafts. Substances should be avoided or sparingly used which abstract water from the skin and roots of the hair."

The foregoing will serve as a specimen of the style of one of the writers.

It must be that the circulation of this work will result in a broader and truer knowledge of dermatology.

Transactions of the New York State Medical Association for 1884.*

This is a superb volume. No general medical society has approached it in elegance, in its volume of transactions. In make-up and general style it is very like the transactions of the American Gynecological Society. It has been very carefully edited by Dr. Austin Flint, Jr. Hence, it is as perfect a book as the best mechanical and editorial skill could make it.

It contains fifty papers, of which seventeen are upon surgery, fifteen on medicine, eleven upon obstetrics and gynecology, three upon ophthalmology, two upon materia medica, one upon physiology, and one upon insanity. Very many of them are superior, and all of them of general interest. We have space for

but few quotations illustrating the scope of some few of these contributions.

Dr. E. M. Moore, of Rochester, in his paper upon transfusion, describes his own apparatus; which he has found most serviceable:

It consists of a canula of peculiar construction, provided with Moncoq's mandril. This, after being placed in the vein of the recipient, can be allowed to remain for a long time without danger of the formation of coagula, because its rounded end prevents the retention of any portion of blood separated from the general circulation. The blood enters through the side of the canula, and, when the moment for its passage has arrived, the mandril is withdrawn. When the moment for the arrest of its passage has come, the mandril can be thrust forward, thus cutting off at once the passage of blood which has been retained in the instrument beyond the allotted time. The canula therefore controls the flow of blood from the beginning to the end. This is a modification of Moncoq's canula. The injection of blood can be made by an apparatus connected with the lateral tube; but I have preferred the use of a simple rubber sac, which, being secured to it by a ligature, can be easily removed and thoroughly cleansed.

From the facts presented, it would seem as if this apparatus met all the indications of the operation for transfusion.

Dr. J. C. Hutchinson, of Brooklyn, N. Y., also presents a paper upon this same subject, and describes his apparatus for performing this operation. He endeavors also to establish the following points:

It appears to be proved by experiments upon animals and by clinical facts, that corpuscles of transfused blood are short lived and rapidly excreted; that the reviving power of the blood does not reside in the red corpuscles; and hence, the danger of excessive loss of blood is not due to the diminution of its corpuscles and other solid constituents.

The important element in transfusion is the restoration of fluid to the vascular system, increasing vascular tension and causing energetic contractions of the heart.

The intra-venous injection of saline solutions in appropriate cases is a more simple and safer operation than transfusion of blood. It can be done without aid of a skilled assistant, and the materials for injection are readily obtained.

If farther experience should confirm the favorable results from intra-venous injections that have been recently reported at home and

* TRANSACTIONS OF THE NEW YORK STATE MEDICAL Association, for 1884. Edited for the Association by Austin Flint, Jr., M. D. New York: D. Appleton. 1885. For sale by the Treasurer, Dr. John Hinton, 41 West 32d Street, New York City, at \$5.00 per volume.

abroad, the operation deserves to be held in the highest esteem, and it is destined to occupy an important position among therapeutic agents.

Dr. A. L. Carroll endeavors to ascertain the exact duration of contagiousness after acute infectious diseases.

Dr. Frederick Hyde collects two hundred and seventy-three cases of dislocation of the hip, occurring in the State of New York. From this mass of material he concludes:

The order of frequency of the four dislocations of the hip are, dorsal, ischiatic, thyroid, pubic.

The signs are so well marked in the dorsal luxations that they can be readily diagnosed.

The diagnosis was clearly made in the majority of the ischiatic dislocations, while in the majority of the cases the deformity was so light, and the impairment of function so trifling, as to give rise to the opinion that no dislocations existed.

The treatment by manipulation or flexion is the most successful in recent luxations.

Tractions or rotations, added to flexion when the latter failed alone, proved successful in several cases.

When extension and counter-extension are used, their efficacy will be enhanced by association with the necessary manipulations, chief of which is flexion of the femur, at right angles with the pelvis during the extension. The merits of this plan of treatment are demonstrated by its success in the recorded cases.

In some cases of failure to restore the head of the bone to its socket, owing to the small aperture in the capsule, this orifice was enlarged, and the reduction at once accomplished by circumduction of the flexed thigh.

In every reported case of dislocation of the hip, complicated by fracture of the acetabulum, or of the neck of the femur, there was failure to reduce, or an imperfect recovery, so that if either of these conditions was known to exist, it would rarely be expedient to attempt reduction.

Reduction is more generally effected now than it was forty or fifty years ago.

Dr. J. J. Burke reports a case of pyæmia and death following an operation for convergent strabismus.

Dr. W. G. Tremaine reports very favorably upon peat as a surgical dressing.

One of the best papers is from Dr. Jane-way, on abscess of the liver. From his large

and accurate studies of this class of cases his paper has great weight.

The real student doctor will find on every page abundant reason for profit, and will rejoice in the formation of this society which, at its first meeting, has done such splendid work. It is contemplated, in the future, to organize sections, so that all of the papers may be discussed more fully, and so the real strength of the body more fully exhibited.

Wormley's Micro-Chemistry of Poisons.*

To many of our readers this book in an earlier edition is an old acquaintance, and to all its possessors, a highly valued one. We have other more complete and comprehensive works on toxicology, but this treatise has always stood alone in the exact information it gives concerning the behavior towards reagents of the minute traces of various poisons which so often, in a criminal trial, form the *corpus delicti* that, in the hands of the expert, may furnish the conclusive evidence of a crime.

Those acquainted with the former edition of the work know what a vast amount of patient research is embodied in these detailed statements, and all who have been called to undergo the ordeal of cross-examination as toxicological experts, have learned the practical utility of such published records of the results of systematic scientific experiment.

The feature, however, which gives to the work its especial character, is the important place it gives to the use of the microscope in the detection of poisons. In this portion of the work Prof. Wormley has been fortunate in having the co-operation of a skilled artist in the person of his wife, whose hand has supplied the steel plate illustrations indispensable to a comprehension of the descriptive text.

While the general features of the work remain unchanged, its matter has been thoroughly revised, and we find that no important im-

*MICRO-CHEMISTRY OF POISONS, Including Their Physiological, Pathological and Legal Relations, With an Appendix on the Detection and Microscopic Discrimination of Blood; Adapted to the Use of the Medical Jurist, Physician and General Chemist. By Theodore G. Wormley, M. D., Ph. D., LL. D., Professor of Chemistry and Toxicology in the Medical Department of the University of Pennsylvania. With 96 illustrations on steel. Second edition.

Philadelphia: J. B. Lippincott and Company.

P. p. 784.

Detroit: For sale by Phillips and Hunt.

provement in the methods of extracting poisons from organic mixtures or discriminating the several alkaloids which may be obtained, has been omitted.

Among the additions made we note especially the chapter on poisoning by gelsemium; the appendix, on the detection and microscopic discrimination of blood (illustrated); the account of poisoning by potassium chlorate; of post mortem diffusion of arsenic; of the presence of arsenic in medicines, in fabrics, and in glass; of the recently-discovered "ptomaines," and of the alkaloid jervine, found associated with veratrine and other alkaloids in the various species of hellebore.

In regard to the important question as to the possibility of discriminating human blood from that of the lower animals, the author says that while in the fresh blood the oval form of the corpuscle in the case of oviparous animals makes the distinction easy, in dried blood there is some difficulty even in making this primary discrimination. The presence, however, of the nucleus in these oval corpuscles may be rendered evident by treating the dried blood with glycerin containing a little acetic acid, and unless the blood is quite old the further addition of a little fresh tincture of guaiacum, followed by a drop of ozonic ether, will bring out the nucleus sharply defined and of a dark blue color. In very old blood, this coloration cannot be produced, but the nucleus can always be made out. In regard to the more important question, whether the blood of different species of mammals can be discriminated by microscopic examination, the conclusion reached is that careful measurement of the corpuscles, even if the blood has been long dried, will enable the expert to distinguish readily human blood from that of most of the lower animals, but not with certainty from that of the monkey, the opossum, the guinea-pig, the musk-rat, the kangaroo, the beaver, the seal, the capybara, or even from that of the dog.

The difficulty arises partly from the fact that in the same species the average diameter of the corpuscle varies considerably in different individuals, and that in the same individual the range of variation above and below the average is large.

In some specimens of human blood the average diameter of the corpuscles may be not greater than 1-3600 of an inch, which is less than the average for a dog's blood. "Hence, while the microscope may enable us to determine with great certainty that a given specimen of blood is *not* that of a certain

animal, and that it may be human, in no instance can it warrant us in affirming that the blood is beyond doubt human, or indicate from what particular species of animal it was derived."

To the mere practitioner of medicine such a book as the *Micro-Chemistry of Poisons* is of course useful only for occasional reference, but for all who are unwilling to appear at a disadvantage when called to the witness stand, even though they disclaim the character of the expert—and for all who care to employ the microscope for other than histological researches, we can confidently recommend the work, which we need hardly say, further, is indispensable to the library of all who give especial attention to toxicology and medico-legal studies.

Ware's Translation of Arlt on the Eye.*

This long wished for work is at last before the profession. After half a century of clinical work on ophthalmology, Arlt at last places some of the results before the profession. We use the term *some* because this volume only treats of the conjunctiva, cornea, sclerotic, iris, and ciliary body. Arlt tells us that if this be received with sufficient favor, he will give us another series of studies of other portions of the eye. The work is avowedly prepared for the general practitioner. The author says he desired to prepare the work for general practitioners, as a guide to them in their general practice. Farther, he hoped to interest them in the study of the various pathological processes involved in these diseases, and their various exciting causes.

That he has succeeded in this end we cannot say. But he has certainly prepared a work of interest to every person who has a desire to study the diseases of the eye. It so happens that this first volume includes only the study of such diseases as can be recognized without an ophthalmoscope, viz.: diseases of the conjunctiva, of the cornea, of the sclerotic, of the iris and ciliary body. The work as it comes to us, in a translation, is entirely devoid of illustrations. It must be confessed that this diminishes its value to the

* CLINICAL STUDIES ON THE DISEASES OF THE EYE, including those of the Conjunctiva, Cornea, Sclerotic, Iris and Ciliary Body. By Dr. Ferdinand Ritter von Arlt. Translated by Lyman Ware, M. D. Philadelphia: P. Blakiston, Son & Co. 1885. Cloth, pp. 325. For sale by John Macfarlane, Detroit, Mich.

average student. We shall hope that as another volume appears discussing the remaining diseases of the eye, it will seem best to the author to employ the artist's skill to interpret some portions of his thought.

As the work was written before the anæsthetic virtues of cocaine were discovered, the author makes no reference to this drug. The translator has in brackets introduced into the text the applications of cocaine which seem to him wise.

Of course, the description of disease contains nothing absolutely new, but it is full of wise suggestions such as come only from a most intelligent use of an unrivaled experience. Thus, in the treatment of suppurative keratitis, he warmly commends the use of the actual cautery to prevent the spread of the corneal destruction. Samisch's incision of the cornea is also given the proper place. The value of eserine in these cases, and, indeed, in all corneal diseases, does not seem to be recognized in any degree. The writer's somewhat considerable experience shows that most cases of corneal disease can be better treated by means of the use of eserine than either the hot iron, or incision of the cornea.

For the relief of recent corneal opacities he uses, first, vinum opii, then insufflation of calomel, and the red precipitate or yellow oxide of mercury ointment; in cases of longer standing, cod liver oil, oil of turpentine with olive oil, or an ointment of iodide of potash with carbonate of potash. Every possibility of relief when medicines fail is fully given.

The chapters on iritis are superb. In gonorrhœal iritis he says that he finds the use of the iodide of potash of great importance. If there be much pain, he gives quinine with the aqueous extract of opium.

Sympathetic cyclitis is very fully discussed, as becomes its importance.

We trust that all of our readers will procure and read this book. If they did, the results would be of great value both to themselves, and their patients, and the profession at large.

Austin on The Perils of American Women.*

This work is intended for popular distribution among women, young and old. Mrs. Mary Livermore heartily endorses it. Briefly, it recounts some of the facts respecting the anatomy and physiology of the female gen-

erative apparatus, and adds thereto some suggestions for avoiding some of the ills that beset the sex. It does not strike us that it is just the book for unmarried girls. To intelligent married women it may do good. But even here it is questionable as to how far it will be of any real service. Still, it is one of the few scientifically prepared works on this subject that is at the disposal of the laity.

The London Medical Student.*

This little book is a compilation from *Punch* and various other sources, including the medical journals. It aims to gather up the funny things that have occurred to the medical profession during its student or post-graduate days. To such as are interested in wit and humor this work will prove acceptable. A similar book is announced from St. Louis, Mo. But it can scarcely take the place of this; rather acts as a supplement to it.

Abstracts from Exchanges.

Prepared by A. B. Lyons, M. D., Walter P. Manton, M. D., and W. E. Chittick, M. D.

Nervous Diseases.

ALCOHOLIC PARALYSIS.—The immediate and transient effects of an excessive quantity of alcohol upon the human nervous system, whether they are manifested in the form of drunkenness, or of delirium tremens, or of an acute attack of insanity, are well known. Scarcely less evident are the effects produced upon the nervous system by a less excessive, but a more prolonged abuse of alcoholic drinks. These effects may be manifested either in a general failure of physical and mental power, or in a form of disease closely resembling progressive paralytic dementia, or in various forms of chronic insanity, or in epilepsy, or in neuralgia, or in paralysis. In the acute form of alcoholic poisoning, no change in the structure of the nervous system has been found, except that the meninges in common with the internal organs and the mucous membranes are the seat of a very decided injection and of a slight exudation. In the chronic form of alcoholism, a number of

* **PERILS OF AMERICAN WOMEN.** By G. L. Austin, M. D. Boston, Lea & Shepard, publishers. pp. 240. For sale by John Macfarlane, Detroit, Mich.

* **THE LONDON MEDICAL STUDENT, and Other Comicalities.** Selected and compiled by Hugo Erichsen, M. D. Detroit, Mich.: Detroit Free Press Printing Co. 1885. Cloth, pp. 207.

pathological changes have been discovered in the nervous system, which, however, vary greatly in different cases.

Of late years the paralysis which results from the abuse of alcohol has been accurately described by numerous observers, and the attempt has been made to discover the lesion of the nervous system, which is associated with this form of paralysis. Two cases which are reported by Dr. Henry Hun, of Albany, in the *American Journal of the Medical Sciences* for April, 1885, are typical examples of this disease, and contribute to a better understanding of it.

Dr. Hun has collected the recorded cases of alcoholic paralysis, and from their study he holds that we are justified in regarding it as a special form of disease with the following symptoms: After a number of cerebral and gastric disturbances due to the alcoholic poisoning the symptoms of the disease proper commence with neuralgic pains and paræsthesiæ in the legs, which gradually extend to the upper extremities, and which are accompanied at first by hyperæsthesia, later by anæsthesia, and in very severe cases by retardation of the conduction of pain. Along with these symptoms appears a muscular weakness which steadily increases to an extreme degree of paralysis, and is accompanied by rapid atrophy and by great sensitiveness of the muscles to pressure and passive motion. Both the sensory and the motor disturbances are symmetrically distributed and the paralysis attacks especially the extensor muscles. In addition to these motor and sensory symptoms there is also a decided degree of ataxia. The tendon reflexes are abolished, and vaso-motor symptoms such as œdema, congestion, etc., are usually present. Symptoms of mental disturbance are always present in the form of loss of memory, and in transient delirium.

The lesion is in all probability a dégénération of the peripheral nerve fibres and of the nerve cells in the cerebral cortex, together with a chronic congestion or inflammation of the pia mater. This lesion explains well the symptoms, although it is curious that alcohol should not attack the spinal cord, but only the highest and lowest part of the nervous system if one may so call the cortex of the brain and the terminal branches of the peripheral nerves.

Gynæcology.

FISTULOUS COMMUNICATIONS BETWEEN THE INTESTINES AND THE FEMALE GENITAL TRACT.—Since the application of plastic

surgery to gynecological operations, the treatment of vesico-vaginal and recto-vaginal fistulæ is as well understood as are the etiology and symptomatology. The result, though, when contrasted with the old tedious plan of cauterization, is brilliant no less to the operator than to the unfortunate woman whose life is rendered miserable by such conditions.

Dr. H. D. Fry, of Washington, in the *American Journal of the Medical Sciences* for April, directs attention to less frequent forms of fistulæ that communicate with the genital canal, and records a very obscure and interesting case of intestino-vaginal fistula, which terminated favorably without surgical interference.

Obstetrics.

A STUDY OF THE SUBJECT OF SPONTANEOUS RUPTURE OF THE MEMBRANES AT FULL TERM OF GESTATION PRECEDING THE BEGINNING OF LABOR.—Dr. G. W. H. Kemper, of Muncie, Ind., in the April issue of the *American Journal of Medical Sciences*, offers a careful study of 50 cases of spontaneous rupture of the membranes, occurring in his first 700 obstetrical cases, and he finds that:

1. The spontaneous rupture of the membranes at full term of gestation, and preceding the beginning of labor-pains, is an event of common occurrence, averaging about once in every 14 labors.
2. When the membranes are broken, as a rule, labor supervenes at once, or within the next four hours, but may be delayed several hours, days, or even weeks.
3. When such an accident occurs, the duration of the labor is not necessarily prolonged, nor rendered more painful.
4. The mortality of the mothers is not augmented, and the ratio of stillborn children, if at all, is so slightly increased as to amount to a minimum.
5. The causes are not well defined. The repetition of the accident in certain women shows that with some a tendency is inherent. A possibility of atmospheric influences, especially a low temperature, as an exciting cause is admissible. Smellie considered obesity a cause. His observations have not confirmed this statement.
6. It is probable that the duration of labor is shorter in cases where the appearance of pains is delayed for some time after the membranes are ruptured.
7. The proper plan of treatment, as given by Smellie, McClintock, Bard, Denman, and Dewees, and corroborated by Dr. Kemper's

experience, is rest, if necessary in a recumbent posture, and patience. All efforts to excite labor-pains are hurtful, meddlesome, and mischievous. Wait for pains, and treat the case on general principles.

8. Finally, that the fear of delay and danger in this class of cases—the classical “dry labor”—promulgated by our obstetrical fathers, and indorsed by successive authors generally, is based on a merest spark of truth, and is one of those medical traditions that experience shows to be over-estimated and to a large degree apocryphal.

THE VALUE OF QUININE, AND SOME OF ITS CONGENERS IN PARTURITION.—Dr. Mullen (*Brit. Med. Jour.*) concludes an article with the above heading, as follows:

1. Quinine, or quinetum, in doses of four grains and upwards, in powder, will start labor pains afresh in twenty or thirty minutes. Repeated at intervals of half an hour or an hour, it will maintain them strongly.

2. It produces no headache, hardly ever a trace of cinchonism caused by similar doses under other circumstances, no sickness, the bitter taste being the only disagreeable circumstance connected with it.

3. The pains it produces are not continuous, like those of ergot, but intermittent, like those produced by normal labor, and evidently not the result of a special stimulus exerted over the uterus only, but of a tonic effect exerted over the whole economy. The patient often feels stronger.

4. The action produced, when ergot is given alone, in cases where the patient has been exhausted, seems often to be spent in delivery of the child, leaving the uterus in a state of exhaustion, unable to contract upon and expel the placenta, allowing hemorrhage, and necessitating extraction. Such is not the case when quinine is properly administered, either alone or before the ergot.

5. It can be used where ergot is absolutely contraindicated with perfect safety, both to mother and child. In one case, five or six hours intervened between the giving of the first dose and the onset of the pains, and the delivery of the child, yet all was right. Except in one case, Dr. Mullen says that he does not remember a child being born alive, when more than two hours elapsed between the administration of ergot and delivery.

c.

Ophthalmology.

At the last annual meeting of the New York State Society (*New York Medical Journal*) Dr. David Webster read a paper on The Treatment of Granular Lids, in which he advocated the use of jequirity by general practitioners.

In the discussion that followed, Dr. H. Knapp, of New York, expressed the opinion that the use of jequirity was so dangerous as to be legitimate only in exceptional cases, practically those of patients who were almost blind. In three instances, in his experience, its action had been so violent as to make him despair of preserving the patients' sight. Others had met with like unfortunate results. As a rule, he preferred the well-known treatment with the crystal of sulphate of copper—there should be no cauterization, but sufficient action to bring about absorption. It should be applied daily, the lids being fully everted.

c.

Laryngology.

LARYNGEAL HÆMORRHAGE.—The name laryngeal hæmorrhage is used for a variety of affections which differ widely in regard to cause, nature of the disease, and severity of the symptoms, and have in common only the effusion of blood into some part of the larynx.

Dr. J. W. Gleitsmann, of New York, in a paper in the *American Journal of the Medical Sciences* for April, proposes to designate by the name laryngitis hæmorrhagica, such effusions of blood on the free surface, or under the epithelium of the mucous membrane, which are of a so-called idiopathic character, and not due to any constitutional disease or traumatic origin. He records a case of this character, and analyzes those that have been heretofore recorded. He finds that in exceptional cases only is hæmorrhage from the larynx a precursor of phthisis.

Practice of Medicine.

THE TREATMENT OF CORPULENCE ON PHYSIOLOGICAL PRINCIPLES.—As analyzed by the *Birmingham Medical Review*, Nov., 1884, Ebstein, in his work on corpulence, gives some valuable practical points for the reduction of obesity.

According to him, fattening is strictly analogous to the fattening of cattle, and depends on over-feeding. He, however, disputes the current view that fat makes fat; on the con-

trary, he thinks fatty food protects the albumen and prevents its forming fat. His plan of treatment, therefore, consists in moderating the quantity of food, and while cutting off all vegetable carbo-hydrates, sugar, starch, etc., allowing a moderate quantity of fat, two or three ounces daily, to be taken. He also suggests that the diet should be monotonous, greasy, and succulent, so as to cause satiety rapidly. He disallows beer, but permits light wines.

The plan advocated appears rational, and is free from the objection of Banting's method, which is too much like starvation. The following is the diet used successfully by Ebstein in one of his cases:

Breakfast.—One large cup of black tea—about half a pint—without sugar; two ounces of white bread or brown bread, toasted, with plenty of butter.

Dinner.—Soup, often with marrow; from four to six and one-half ounces of roast or boiled meat, vegetables in moderation, leguminous preferably, and cabbages. Turnips were almost, and potatoes altogether excluded. After dinner, a little fresh fruit. For second course, a salad, or stewed fruit without sugar. Two or three glasses of light wine, and immediately after dinner a large cup of tea, without milk or sugar.

Supper.—A large cup of black tea, as before. An egg, a little fat roast meat, or both, or some ham with its fat, bologna sausage, bread, well buttered, occasionally a small quantity of cheese, and some fresh fruit.

On this diet the patient lost twenty pounds in six months.

Ebstein insists on the necessity of always keeping to the restricted diet if the tendency to corpulence is to be successfully combated.

THE ÆTIOLOGY AND TREATMENT OF NASAL CATARRH, WITH SPECIAL REFERENCE TO THE DEVIATED SEPTUM.—At a late meeting of the New York Academy of Medicine (*N. Y. Med. Jour.*), Dr. W. C. Jarvis read a paper on the above subject. He said that for several years he had employed the following classification as denoting different forms of deviation of the nasal septum: Osseous, cartilaginous, osseo-cartilaginous, and hypertrophic. By far the most common was the cartilaginous; next in frequency was the osseo-cartilaginous. The causes of nasal catarrh depending upon these forms of deviation of the septum were, first, pressure irritation, and, second, defective drainage.

Deviation of the septum was either heredi-

tary, traumatic, or acquired. The inherited form often co-existed with, and was dependent upon, a peculiar formation of the hard palate. The palate being abnormally high and irregular, caused the nasal septum to be deflected to one side, and the higher the elevation of the palatine arch, the greater the deviation of the septum. But a palatine arch of considerable depth, if irregular, need not necessarily be attended by deviation of the septum. A peculiar conformation of the parts over the upper jaw often existed in cases of deviated nasal septum which could be recognized at once, and thus the physician was often enabled to say that the person was subject to chronic nasal catarrh. The author opposed with some warmth the custom of looking to a diathesis, or specific constitutional taint, as a determining factor in nasal catarrh. Remarkable intellectual faculties were likely to be accompanied by nasal catarrh, the encroachment of the cranium upon the skeleton of the face causing deviation of the nasal septum, and thereby catarrh. Traumatic deviation of the septum and catarrh were frequently met with in pugilists and persons of low life.

Dr. Jarvis then exhibited a variety of instruments employed in the correction of deviation of the septum.

STUDY OF A FORM OF ALBUMINURIA.—Dr. Stanley M. Rendall (*Edinburgh Med. Jour.*) after a long, careful and thorough study of a form of albuminuria (which he does not name) summarizes as follows:

1. That we have here a true albuminuric hémato-gène,—in this sense, that it is produced by an alteration of the blood plasma, and not by an alteration of the renal organs, or of the blood-pressure.

2. That this alteration of the blood plasma is intermittent, and can be traced to an introduction into the circulatory current of an imperfect form of albumen.

3. That this imperfect form of albumen results from a defective digestive process, as it occurs only during digestion, but what this defect consists in is at present doubtful.

4. That this intermittent digestive albuminuria is not associated with any organic lesion of the kidney, or with any renal alteration whatever of even a transient nature. But that whether this condition may lead up to an ultimate change in the kidney, if not checked by appropriate treatment, is a question of grave importance.

5. That the prognosis in these cases is

favorable, always supposing that they are not neglected, and that an appropriate treatment is carried out.

6. That the treatment should consist in the exhibition of those drugs which increase organic combustion. Iron, the chlorides, hypophosphites, etc. A thorough change of air and entire rest from work and all mental worry; also a carefully regulated diet.

C.

THE TREATMENT OF SICK-HEADACHE.—

Dr. W. Gill Wylie (*N. Y. Med. Jour.*), of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken.

Dr. Wylie states that sick-headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.

C.

Surgery.

A STATISTICAL REVIEW OF THE OPERATIVE MEASURES DEvised FOR THE RELIEF OF PYLORIC STENOSIS.—But few of the ills to which humanity has fallen heir are attended with more distressing symptoms than those produced by stenosis of the pyloric orifice, from any cause whatever, and in but few has the prognosis been so absolutely hopeless. Until within the past six years the condition was regarded as beyond the domain of surgical interference, and with the diagnosis, "stenosis of the pylorus," the fate of the patient was irrevocably sealed. Internal medicine offered absolutely no hope to the unfortunate sufferer from pyloric stenosis, until Péan, in 1876, performed pylorotomy for the relief of pyloric disease, and ushered in a new era in abdominal surgery.

Dr. Randolph Winslow, of Baltimore, in a scholarly and very able paper, published in the *American Journal of the Medical Sciences* for April, 1885, has collected and analyzed all the recorded cases, 85 in number, of operative interference for the relief of pyloric disease. He fully discusses the technique of the different procedures and presents the following valuable deductions:

1. In cancer of stomach not producing stenosis, anodynes should be given in quantities sufficient to relieve distress, and no operation should be performed.

2. Pylorotomy for carcinoma is followed by 76 per cent. mortality, hence it should only be very exceptionally performed in those cases where, with marked stenosis, the pylorus is not adherent to the neighboring organs, and the patient is young and fairly strong.

3. In other cases of carcinomatous stenosis, as only very temporary benefit can be obtained, gastro-enterostomy should be performed.

4. In cicatricial stenosis digital division should be performed, but if it is impossible owing to great thickening of the walls, resection in those who are well nourished, and gastro-enterostomy in the debilitated will both be followed by good results.

5. Hæmorrhage or perforation from ulcer or other causes than stenosis, does not present indications for pylorotomy.

6. Duodenostomy, gastrostomy for the passage of a tube, and complete gastrectomy should all be replaced by gastro-enterostomy.

REMOVAL OF MARROW IN OSTEO-MYELITIS.

Dr. Chas. Keetley, of London (*Annals of Surgery*, Jan., 1885), thinks that the marrow may be removed from the long bones with safety, in fact believes that it is not essential to the life of the bone, and that the bone deprived of it will unite when fractured just as well as left in the normal state. In performing this operation when it is necessary, he injects a solution of corrosive sublimate 1 to 1000. He also uses an ethereal solution of iodoform. He reports three cases of his own and fifteen recorded by others, and concludes with the following practical observations:

1. In the face of Schedi's observations as to the dangers of using iodoform too freely, and on the occasional existence of idiosyncrasy with regard to that drug, I should hesitate to imitate the surgeons who fill medullary cavities with it. Moreover, my own cases show that it is superfluous to do so.

2. If the shaft of a long bone cannot be thoroughly scraped out through a lateral hole, the bone may be completely divided, and yet speedy and thorough union reckoned on. The experiments of Maas on animals, above referred to, prove how unnecessary is the preservation of the medulla in order to secure union of fractures. And one of my own cases proves that the same law applies to the human subject.

A CASE OF LODGMENT OF A BREECH-PIN IN THE BRAIN; RECOVERY.—Dr. G. W. H. Kemper, of Muncie, Indiana, reports in the

January number of *The American Journal of the Medical Sciences* a very instructive case in which a lad received a compound fracture of the frontal bone, immediately above the right frontal sinus, by a bursting gun. The breech-pin was found imbedded in the brain, to a distance of one-half inch, and was withdrawn by the aid of dressing-forceps. No untoward symptoms were developed until the evening of the fourth day, when a convulsion ensued because of pent-up pus, and after the removal of the cause no further trouble followed. The lesson to be derived from the study of the case is the necessity of maintaining free drainage, thus preventing an abscess from extending into the brain and becoming fatal.

PURULENT DISCHARGES FROM THE ANTERIOR PORTION OF THE URETHRA.—Dr. Robert Ultzmann (*Pyuria*, p. 23) says that discharges of the anterior urethra are characterized by the fact that if the urine is passed into two glasses, only the first half will always be dimmed by flakes, fibres or otherwise, while the second half of the urine remains clear and transparent; and farther by the fact that in the intervals between urination, the secretion escapes spontaneously from the meatus; or at least appears at this place, spotting the linen to a greater degree since there is no muscle in the urethra between the compressor urethræ and the meatus to cut off the free exit of pus.

PILES, THEIR HYPODERMIC INJECTION.—

Dr. J. W. Girard (*Med. Bulletin*) says that he has used hypodermic injections for ten years in treating piles, treating about two hundred cases without a single failure, or return of the tumor. He takes one part of tannic acid, two parts of carbolic acid, and eight parts of glycerine. With this mixture he injects each pile separately, and in a few days they slough away and generally heal kindly under dressings of carbolic cerate. If there be much constitutional disturbance he controls it with a steam bath or a hot sitz bath.

Sanitary.

POSTURES IN SCHOOL, THEIR INFLUENCE ON PHYSICAL DEVELOPMENT.—(*Medical Times and Gazette; Boston Medical Journal*.) Noble Smith enters a protest against checking the natural activity of children by the postures they are compelled to assume while in school. He considers that "the formation of the skeleton favors the production of deformity when constrained postures are main-

tained for long periods," and instances the effect of posture upon adults in the different trades: the waiter in restaurants becomes flat-footed and knock-kneed; the seamstress, the clerk, and the engraver show by their rounded backs the effect of long-continued posture. He writes that "it is a false system to attempt to refine young girls by restricting their natural freedom of movement. It is this false process which does so much to encourage the production of deformity. Long walks in precise and stately file produce a harmful strain upon the spine and legs, whereas, free movement in such games as cricket and lawn tennis affords a healthful exercise. Touching upon the cause of lateral curvature in girls, he thinks that all the factors in the formation of curvatures of the spine occur to a greater extent in girls than in boys, in that "from infancy upward girls are discouraged from playing and romping."

Toxicology.

NITRITE OF AMYL IN STRYCHNINE POISONING.—Dr. R. A. Hare (*Boston Medical Journal*, Nov. 20, 1884) presents evidence from which he draws the following conclusions:

1. Nitrite of amyl does prolong life in strychnine poisoning, although its action is so fleeting compared to that of its adversary, that it can be used only to tide over the patient until more persistent remedies or antidotes, such as bromide of potassium, or chloral, can be administered.

2. It cannot be used by inhalation as an antidote with any chance of security from a fatal termination, owing to the facts regarding expiration before stated.

3. The longer the nitrate be given after the strychnine, the less good it will do, provided the strychnine has already shown itself, or otherwise. This is true not because the nitrite is less powerful after the first convulsion, but because death is more apt to come before the nitrite can fully act.

4. The nitrite has to be given at such times and in such quantities that its full physiological action be present constantly, otherwise, in the instant which may supervene between the after effects of one dose and the beginning of the next, the patient may die.

5. In cases of strychnine poisoning, the nitrite being used as an antidote, an injection of the nitrite should be given, and the patient kept moderately under its influence by inhalations, and until other remedies are obtainable.

— THE — DETROIT LANCET

— A —
MONTHLY EXPONENT OF RATIONAL MEDICINE.

EDITED BY LEARTUS CONNOR, A. M., M. D.

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*Professor of Organic Chemistry in the Kentucky
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Price, in four ounce packages, \$1.00; also for convenience and economy, we put up Beef Peptonoids in 16 oz. tins, which will be sent to any physician's address, post paid, on receipt of \$2.50. Sample mailed on application.

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Formula.—Every Fluid-Drachm represents FIVE grains EACH—Celery, Coca, Kola, Viburnum and Aromatics.

Indications.—Impotency, Spermatorrhea, Loss of Nerve-Power (so usual with Lawyers, Preachers, Writers, and Business Men), Nervous Headache, Neuralgia, Paralysis, Dysmenorrhea, Hysteria, Opium-Habit, Inebriety, Prostatitis, Dyspepsia, and ALL LANGUID or DEBILITATED conditions of the System—Indispensable to restore a patient after alcoholic excess.

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UNRIVALED AS A UTERINE TONIC in IRREGULAR, PAINFUL, SUPPRESSED and EXCESSIVE MENSTRUATION.

It restores normal action to the Uterus, and imparts vigor to the entire Uterine System.

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Each fluid drachm contains fifteen grains of the Combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.

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DIRECTIONS.—To Eradicate the Malaria from the system, One Teaspoonful in water, three times a day. For Intermittent, Remittent, and other Fevers, Five to Twenty Drops, every two or three hours. As a prophylactic against Malaria, One Teaspoonful twice a day.

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Bone-Calcium Phosphate $\text{Ca}_2\text{P}_2\text{O}_4$, Sodium Phosphate $\text{Na}_2\text{H}_2\text{P}_2\text{O}_4$, Ferrous Phosphate $\text{Fe}_2\text{P}_2\text{O}_4$, Trihydrogen Phosphate $\text{H}_3\text{P}_2\text{O}_4$.

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The Lactophosphates prepared from the formula of Prof. Dusart, of the University of Paris. Combines with a superior Pemmican Sherry Wine and Aromatics in an agreeable cordial easily assimilable and acceptable to the most irritable stomachs.

Phosphorus, the oxidizing element of the Nerve Centres for the generation of Nerve Force; Lime Phosphate, an agent of Cell Development and Nutrition; Soda Phosphate, an excitant of Functional Activity of Liver and Pancreas, and Corrective of Acid Fermentation in the Alimentary Canal; Iron, the Oxidizing Constituent of the Blood for the Generation of Heat and Motion; Phosphoric Acid, Tonic in Sexual Debility; Alkaloids of Calisaya, Anti-Malarial and Febrifuge; Extract of Wild Cherry, uniting with tonic power the property of Calming Irritation and Diminishing Nervous Excitement.

THE SUPERIORITY OF THE ELIXIR consists in uniting with the Phosphates the special properties of the Cinchona and Prunus, of Subduing Fever and Allaying Irritation of the Mucous Membrane of the Alimentary Canal, which adapts it to the successful treatment of Stomach Derangements and all diseases of Faulty Nutrition, the outcome of Indigestion. Malassimilation of Food, and failure of supply of these essential elements of Nerve Force and Tissue Repair.

The special indication of this combination of Phosphates in Spinal Affections, Caries, Necrosis, Ununited Fractures, Marasmus, Poorly Developed Children, Retarded Dentition, Alcohol, Opium, Tobacco Habits, Gestation and Lactation, to promote Development, etc., and as a physiological restorative in Sexual Debility, and all used up conditions of the Nervous System, should receive the careful attention of good therapeutists.

There is no strychnia in this preparation, but when indicated, the Liquor Strychniae of the U. S. Dispensatory may be added, each fluid drachm of the solution to a pound bottle of the Elixir making the 64th of a grain to a half fluid ounce, an ordinary dose, a combination of a wide range of usefulness.

DOSE.—For an adult, one tablespoonful three times a day, after eating; from seven to twelve years of age, one dessert-spoonful; from two to seven, one teaspoonful. For infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of T. B. WHEELER, M. D., Montreal, D. C.

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SARCO-PEPTONES!

(σαρξ, σαρκος—*flesh*; πεπτω—I *digest*.)

RUDISCH'S EXTRACT OF PEPTONIZED BEEF.

We desire to state to the medical profession that

WE HAVE ASSUMED THE AGENCY

for the sale of the above important preparation.

This preparation perfectly meets the modern idea of an artificially digested food, as well as that of an extract of meat, being rich in nitrogenous matter in the form of Peptones derived from the Albumen of the meat.

"SARCO-PEPTONES" contains not only *all the extractive substances*, organic and inorganic salts of the beef, but also *most of its albuminous* portion converted into a soluble and easily assimilable form, known in Physiology as Peptones.

SARCO-PEPTONES cannot be compared either with beef-tea or with the commercial beef extracts after Liebig's formula, for whilst this preparation is a Food in the same sense as beef is, the best authorities, including Baron Liebig himself, have demonstrated that Liebig's Extract is only a Stimulant.

No foreign matter is incorporated with SARCO-PEPTONES, as it would only serve to dilute the extract. For this reason it is one of the *cheapest* products of its kind ever put on the market.

One part of SARCO-PEPTONES corresponds in nutritive value to *eight parts* of fresh beef.

All the objectionable features of artificially digested meats heretofore offered to the profession and the public have been overcome in SARCO-PEPTONES, owing to the special method of preparing the same.

The superiority of SARCO-PEPTONES consists in:

I. The Large Percentage of Peptones which it Contains.—There are 35 per cent. of Peptones, beside other nitrogenous substances.

II. Its Absolute Purity.—It is diluted with no foreign matter whatsoever, but contains only such as is derived from the meat itself.

III. Its Uniformity.—The method of preparing this product is such as at all times guarantees its uniformity.

IV. Its Palatability.—The taste of this preparation is such as to be acceptable to the most fastidious patient.

V. Its Perfect Solubility in Water.—Sarco-Peptones will dissolve at once in boiling water; and in a comparatively short space of time, in cold water.

The process of digestion has been partially accomplished in the preparation of this article, hence the *weakest stomach* will be able to assimilate it.

Therefore, SARCO-PEPTONES may be employed as a remedy in ANÆMIA, EXHAUSTION, INDIGESTION, FEVERS, etc., and in all cases of *convalescence* as well as by the healthy.

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PURE EULACHON OIL.

Prepared from

The Candle Fish---Thaleichthys pacificus.

Eulachon Oil is derived from a small fish found in the rivers of British Columbia, and commonly known by its Indian name, Eulachon or Oolachon. This fish is so rich in oil that it is said to burn with a flame, on ignition, and from this fact it is also known as the Candle Fish.

In offering this oil to the profession we do so on the strength of reports from trustworthy authorities, who assert it to be an efficient substitute for cod-liver oil. It has the advantage over the latter in that it is less repulsive to the taste, less apt to disturb the stomach and less liable to cause, or aggravate existing, diarrhoea. Among these authorities we take the liberty of mentioning Dr. E. L. Shurly, Professor of Laryngology and Clinical Medicine in the Detroit Medical College, of whose report on the use of this oil, as it appeared in the N. Y. Medical Journal, Nov. 29, 1884, we shall be pleased to furnish reprints on application. Professor Shurly's article concludes with the following expression: "It seems to me that its less disagreeable properties and its equally good, if not much better, therapeutic value, will give it a great advantage over cod-liver oil, which has held for so many years such a prominent place in the physician's armamentarium."

EMULSION EULACHON OIL.

By means of this emulsion any objectionable properties of taste or smell which may inhere in the oil, are completely overcome. It will be found to agree when cod-liver oil emulsion cannot be tolerated, besides being in no sense inferior to the latter for the purposes for which it is prescribed.

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